# Year 3 Answers



# Term 1

# Units 1 – 10

# English ANSWERS

# Term 1

# YEAR 3

#### SET 1

1. a 2. b

Movie World

1. b 2. b

#### SET 2

| 1. d | 2. b | 3. c | 4. a |
|------|------|------|------|
| 5. c | 6. b | 7. c | 8. d |

#### SET 3

| 1. c | 2. c | 3. d | 4. d |
|------|------|------|------|
| 5. a | 6. d |      |      |

#### SET 4

Alice Anderson had no friends at all. Even Georgina Grayson, who was the nicest girl in the whole school, refused to talk to Alice. You see, Alice Anderson never told the truth about anything. When she first started school she told everyone that her mother was a secret agent and her father was an astronaut. It didn't take long for everyone to discover that Alice was making the whole thing up.

#### GRAMMAR

#### ACTIVITY 1

1. Do the **<u>girls</u>** have enough potatoes?

- 2. The **mountain** is covered in snow.
- 3. Take this ball to those **boys** over there.
- 4. The yellow **<u>bird</u>** is sitting on its eggs.
- 5. The **<u>leopard</u>** changed his spots.
- 6. The <u>computers</u> are not working.

#### ACTIVITY TWO

- 1. kittens/cats
- 2. ice-cream, ice-block, chocolate, etc
- 3. questions
- 4. bell/telephone
- 5. lollies, marbles, apples, books, etc

#### VOCABULARY

1. allowed/aloud

- 2. berry/bury
- 3. been/bean
- 4. fined/find

### UNIT 2

#### SET 1

1. b 2. a <u>Insects</u> 1. c

#### SET 2

| 1. b | 2. c | 3. d | 4. d |
|------|------|------|------|
| 5. d | 6. c | 7. b |      |

#### SET 3

- 1. David bookcase full of prizes to prove he was a good model maker.
- 2. David's Disneyland model was different because it was the actual size of the real Disneyland.
- 3. David did not want to win a silver trophy because he would rather win a ride in the real space shuttle because it would be more exciting.
- 4. David was making a model motorbike out of connect-a-stix when his mother came into the room.
- 5. David hated instructions.
- 6. The main idea of this extract is that David, who is extremely good at building models, is going to enter a model making competition.

#### SET 4

Mr Scarsdale was looking over our heads. 'Well?' he said.

Ram glanced back and kicked my chair. 'This is it,' he hissed.

Pete was standing at the open classroom door, shuffling as if his legs wanted to run off somewhere, with his eyes looking around for a place to run to.

'I'm late,' Pete mumbled.

Ram nodded and pulled four chocolate bars from his pocket. The bet was on.

#### GRAMMAR

#### EXERCISE 1

- 1. teeth
- 2. men
- 3. mice
- 4. children
- 5. geese
- 6. women
- 7. cars
- 8. crosses
- 9. shoes
- 10. sheep
- 11. deer
- 12. fish

#### EXERCISE 2

- 1. Five <u>women</u> ate their apples under the tree.
- 2. The child was crying for his mother.
- 3. Those <u>sheep</u> are wandering away from the shepherd.
- 4. My wobbly **<u>tooth</u>** is hurting me.
- 5. Don't be afraid. Those <u>geese</u> won't hurt you.

#### VOCABULARY

Teacher.

# UNIT 3

#### SET 1

1. b 2. c 3. b 4. a 5. c 6. b 7. a

#### SET 2

| 1. c | 2. b | 3. d | 4. d       |
|------|------|------|------------|
| 5. d | 6. c | 7. d | 8. Teacher |

#### SET 3

| 1. swimming   | 2. bruise   | 3. easily |
|---------------|-------------|-----------|
| 4.scales      | 5. reefs    | 6. ragged |
| 7. substitute | 8. slippery | 9. under  |

#### SET 4

#### **<u>Peg Leg Meg</u>** Nan Bodsworth

In the tower room of the great island fortress, Maude the Marauder watched the pirate ships come in.

"Fred!" she yelled to her grandson. "FRED! Get up here and help me down the stairs. And find me sword and sea boots. We gotta get down to the wharf quick. Before Meg does. Don't want that blabber–gob telling no tales about us, do we?"

But Meg was already on the wharf when her father, Black Jack, came springing up the ladder from the Saucy Sally's dinghy.

"I've got a present for you, Meg," he said, and whipped the black cloth off a cage with a parrot in it.

"Souse me sea socks for supper time," said the parrot. "Land ahoy and about time too." "Oh!" said Meg, entranced. "Where did you get it?"

"Off a ship that we sank," said Black Jack. He opened the door of the cage, and the parrot fluttered straight up onto Meg's shoulder and nibbled at a strand of her curly red hair. "Why don't he give me a present?" whined

Fred, staring at Poll.

"It makes me grind me teeth," said Maude the Marauder gruffly. "Baff-boozle me, Fred, but ever since Meg got her peg leg, he don't seem to trust you. Ever since you pushed 'er into Crocodile Creek."

Maude the Marauder smiled her bloodcurdling smile.

"I don't think Black Jack believed us, Fred, when we said you were with me all that day. You weren't anywhere near Crocodile Creek, were you? Not our fault if Meg tells whopping lies!"

And she cackled.

#### GRAMMAR

#### EXERCISE 1

- 1. Wolves
- 2. Scarves
- 3. Thieves
- 4. Leaves
- 5. Wives

- 6. Halves
- 7. Elves
- 8. Elves
- 9. half
- 10. leaves
- 11. scarf

#### EXERCISE 2

- 1. cuffs
- 2. cliffs
- 3. puffs
- 4. earmuffs
- 5. scruffs
- 6. show-offs

#### VOCABULARY

1. c 2. b 3. a 4. c

## UNIT 4

#### SET 1 – "Dad"

Teacher

#### <u>Wasps</u>

- 1. a) solitary wasps, b) social wasps
- 2. Social wasps build nests
- 3. Up to several thousand

#### SET 2

| 1. c | 2. b | 3. b | 4. a |
|------|------|------|------|
| 5. b | 6. b | 7. a |      |

#### SET 3

| 1. d | 2. b | 3. c | 4. a |
|------|------|------|------|
| 5. c | 6. b |      |      |

#### SET 4

I have visited Sydney, Brisbane, Alice Springs, Canberra, Victoria and Adelaide. My mum says that I am lucky to have seen so many places. I don't think that I am so lucky. My best friends Kelly, Amanda and Vicki have been all over the world. Kelly has been to New Zealand, Thailand and Singapore. Vicki has been to Italy, Spain and Portugal. When Amanda was in America she visited Disneyland, New York and Chicago.

#### GRAMMAR

EXERCISE 1 Teacher

#### EXERCISE 2

- 1. September
- 3. Canberra
- 5. Elizabeth
- 2. Kevin Rudd
- 4. The Lion King

#### VOCABULARY

1. difficult

| W | t | r | u | d | e | e | r |
|---|---|---|---|---|---|---|---|
| d | h | g | 0 | h | у | а | i |
| r | f | 1 | 0 | u | d | k | g |
| у | d | у | r | m | r | i | h |
| e | t | r | i | с | k | у | t |
| j | m | b | r | а | v | e | а |
| k | i | 1 | h | 1 | 0 | 1 | а |
| 1 | f | 0 | v | e | r | р | s |

- 2. icy
- 3. troubled
- 4. hazardous
- 5. amusing

### UNIT 5

| SET 1 |      |    |           |
|-------|------|----|-----------|
| 1. c  | 2. a | 3. | 3,5,1,4,2 |

SET 2

1. c 2. c 3. b 4. d 5. c 6. b

#### SET 3

1. c 2. a 3. d 4. b 5. c 6. d

#### SET 4

#### Mother's Day

Ro met Molly at the station and seemed happy and excited. Molly expected them to go to the shop first, but her mother said she had the rest of the day off.

"I've got something to show you."

"What?"

"It's your Christmas present really."

"So do I get it now?"

"Well, I won't see you on Christmas Day, will I?"

Molly thought about it - Christmas Day had always been a big day in the house by the lake, especially since Locky was old enough to understand about Santa and presents, but lately things had changed and she wasn't sure she wanted to be there this year

"I could come up on the train maybe."

"Let's think about that later. You're going to have to see your present now anyway."

#### GRAMMAR

Exercise 1

| 1. school  | 2. gaggle |
|------------|-----------|
| 3. platoon | 4. bunch  |

5. fleet

#### Exercise 2

Teacher

#### VOCABULARY

| 4. | 0 | V | er |  |
|----|---|---|----|--|
| -  |   | • | 1  |  |

1. dry

7. tricky

3. ri 6. b

# right brave

#### SET4

- 1. "Can I please stay up late tonight?" asked John.
- 2. Michael, Jenny, Wesley and Vern went to the movies on Friday night.
- 3. Do you like to eat raspberries?

# UNIT 6

#### SET 1

- 1. Pour yogurt into paper cups. Fill them almost to the top.
- 2. Stretch a small piece of plastic wrap across the top of each cup.
- 3. Using the popsicle stick, poke a hole in the plastic wrap. Stand the stick straight up in the center of the cup.
- 4. Put the cups in the freezer until the yogurt is frozen solid.
- 5. Remove the plastic wrap, peel away the paper cup, and eat your pop!

#### SET 2

- 1. eggs
- 2. maggots
- 3.stinking
- 4.perched
- 5. mistake
- 6. starvation
- 7. flies
- 8. fish
- 9. important
- 10. bloom
- 11. life

#### SET 3

1. rarely

5. Frog

6. Teacher

- 2. Because he had learned how generous and kind Tortoise was.
- 3. Greedy, cunning, nasty, unkind, etc

4. To stuff one's face with food

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5. loud

2. rude

4. "Stop teasing me," cried Dana. OR "Stop teasing me!" cried Dana.

#### GRAMMAR

#### Exercise 1

| Collective | Singular | Plural  | Proper  |
|------------|----------|---------|---------|
| class      | bag      | scarves | Sydney  |
| choir      | egg      | movies  | Maria   |
| orchestra  | whale    | mice    | Canada  |
|            | pencil   |         | England |

#### EXERCISE 2

Teacher

#### VOCABULARY

- 1. available
- 2. sequence
- 3. attract
- 4. generous
- 5. advice

# UNIT 7

#### SET 1

Exercise 1

- 1. d
- 2. a
- 3. b

4. c

#### Exercise 2

Teacher

#### SET 2

- 1. b
- 2. c
- 3. b
- 4. c
- 5. d
- 6. b
- 7. a
- 8. d

- SET 3
- 1. b 2. c
- 2. c 3. d
- 4. d
- 5. a
- 6. b

#### GRAMMAR

- Exercise 1
- a) yes
- b) no
- c) no
- d) yes
- e) no

#### Exercise 2

- 1.
  - a) This pineapple
  - b) My old bike
  - c) Her hair
  - d) My parrot
- 2.
  - a) can, draw
  - b) plays
  - c) hear , is
  - d) gallops
- 3. Teacher

#### PUNCTUATION

It was lovely summer weather in the country, and the golden corn, the green oats, and the haystacks piled up in the meadows looked beautiful. The stork walking about on his long red legs chattered in the Egyptian language, which he had learnt from his mother. The corn-fields and meadows were surrounded by large forests, in the midst of which were deep pools. It was, indeed, delightful to walk about in the country.

#### VOCABULARY

1. **Juice** does not belong because the rest are pieces of fruit.

- 2. **Snake** does not belong because the rest have legs, a snake is also a reptile.
- 3. **Pillow** does not belong, the rest are objects you sit on.
- 4. **Squirrel** does not belong, because unlike the others it is not a native Australian animal.

#### SET 1

Exercise 1 2, 1, 4, 3

#### Exercise 2

Teacher

#### SET 2

1. b – because we are being introduced to the main characters, the setting and the situation.

2. b

- 3. c
- 4. c
- 5. b
- 6. d
- 7. a

#### SET 3

- 1. We know that Sara is feeling scared because she is speaking in a whisper and cuddling close to her papa.
- 2. Sara's father is taking her to a boarding school.
- 3. A beautiful bungalow, many servants, toys and pets.
- 4. Children were usually sent away from India because the climate is unhealthy for them.
- 5. The word 'obliged' means that you are required to do something.
- 6. The main idea is that Sara is feeling nervous about leaving her papa to live in a strange and unfamiliar place.

#### PUNCTUATION

Peter was most dreadfully frightened; he rushed all over the garden, for he had forgotten the way back to the gate. He lost one of his shoes among the cabbages, and the other shoe amongst the potatoes. After losing them, he ran on four legs and went faster, so that I think he might have got away altogether if he had not unfortunately run into a gooseberry net, and got caught by the large buttons on his jacket. It was a blue jacket with brass buttons, quite new.

#### GRAMMAR

Exercise 1

- 1. eat
- 2. enjoys
- 3. see
- 4. practises
- 5. like

#### Exercise 2

- 1. are
- 2. is
- 3. is
- 4. are

#### Vocabulary

- 1. companion
- 2. fort
- 3. meringue
- 4. porter

### UNIT 9

#### SET 1

Exercise 1

a)

- 1. Both games involve a ball.
- 2. Both are team sports.
- 3. Both involve scoring goals.

#### b)

- 1. In soccer you kick the ball and in netball you pass the ball.
- 2. The score is higher in netball than in soccer.
- 3. There are 11 players in a soccer team and 7 in a netball team.

#### Exercise 2

- 1. alike
- 2. similarity
- 3. both
- 4. differences
- 5. Unlike
- 6. difference
- 7. but
- 8. Instead

#### SET 2

- 1. flows
- 2. wide
- 3. fertile
- 4. floods
- 5. southern
- 6. steadily
- 7. mud
- 8. connects
- 9. sail
- 10. travel

#### SET 3

- 1. c
- 2. c
- 3. c
- 4. d
- 5. d
- 6. c

#### SET 4

"Quack?" said Jemima Puddle-duck, with her head and her bonnet on the one side— "Quack?"

The gentleman raised his eyes above his newspaper and looked curiously at Jemima – "Madam, have you lost your way?" said he.

He had a long bushy tail which he was sitting upon, as the stump was somewhat damp. Jemima thought him mighty civil and handsome. She explained that she had not lost her way, but that she was trying to find a convenient dry nesting place.

"Ah! is that so? Indeed!" said the gentleman with sandy whiskers, looking curiously at Jemima. He folded up the newspaper and put it in his coattail pocket. Jemima complained of the superfluous hen.

"Indeed! How interesting! I wish I could meet with that fowl. I would teach it to mind its own business! But as to a nest – there is no difficulty: I have a sackful of feathers in my woodshed. No, my dear madam, you will be in nobody's way. You may sit there as long as you like," said the bushy long-tailed gentleman.

#### GRAMMAR

Exercise 1

- 1. shouted
- 2. planted
- 3. wandered
- 4. scratched
- 5. handed

#### Exercise 2

- 1. She <u>was</u> running late for her dance class.
- 2. The elephant **<u>had</u>** not eaten for days.
- 3. They <u>were</u> excited about their adventure holiday.
- 4. He <u>did not</u> think it <u>was</u> very funny.

#### VOCABULARY

- 1. Her skin was as white as snow.
- 2. My mum is as wise as an owl.
- 3. The sunset was like melted ice cream.
- 4. My brother's singing is like a dog howling at the moon.

Exercise 2 Teacher

#### SET 1

Exercise 1

1. c

2. Differences:

Habitat/Location – Africa-India

#### Size

- a) African elephants are larger and have larger ears than Indian elephants; and/or
- b) An African elephant has two lips on its trunk so it can pick up small objects from the ground; and/or
- c) African elephants are tallest at the shoulder and their skin is more wrinkled, while an Indian elephant is tallest at the arch of the back.

#### Exercise 2

Teacher

#### SET 2

- 1. d
- 2. d
- 3. b
- 4. c
- 5. c
- 6.

#### Similarities

- a. Both are reptiles
- b. Both can lay eggs.
- c. Both can live in water.

#### Differences

- a. Lizards usually have legs
- b. All snakes are carnivores, some lizards eat plants.
- c. Most lizards are small.

#### SET 3

1. A meteorite is the remaining part of a meteoroid that survives entering the earth's surface without burning up.

- 2. Meteors appear to look like stars because they burn brightly as they fall to earth.
- 3. A meteor shower appears when the earth passes through the trail of debris left by a comet when it orbits the sun.
- 4. Debris the rubbish left when something is broken or destroyed.
- 5. It is important to understand that meteoroids do not originate from the constellations or stars in the constellations.

#### SET 4

When I was little I used to like the pop singers Madonna, Janet Jackson, Cyndi Lauper and Whitney Houston. Now I don't listen to their music much. When I was little my favourite TV shows were "Mash", "Neighbours", "Home and Away" and "The Goodies". Now I enjoy watching DVDs instead of television. My favourite movies include "The Wedding Singer", "Shadowlands", "Alvin and the Chipmunks" and "Enchanted".

#### GRAMMAR

Exercise 1

- 1. beautiful
- 2. amusing/comical
- 3. large/huge
- 4. lovely

Exercise 2

Teacher

#### VOCABULARY

Exercise 1

- 1. simile
- 2. metaphor
- 3. simile
- 4. metaphor
- 5. simile
- 6. metaphor

Exercise 2 Teacher

# **General Ability** ANSWERS

# Term 1

# YEAR 3

#### WORD LIST

- 1. sew
- 2. bought
- 3. stiff
- 4. tune
- 5. polite
- 6. sneer
- 7. inedible
- 8. scarce
- 9. strides
- 10. burst
- 11. firm
- 12. special

#### "ow-" FAMILY

- 1. follow
- 2. tower
- 3. narrow
- 4. tomorrow
- 5. towel

#### **USING CLUES (from "ow-" Family)**

- 1. tow
- 2. drown
- 3. tomorrow
- 4. hollow
- 5. eyebrow
- 6. marrow
- 7. shadow
- 8. sow
- 9. elbow
- 10. narrow

#### JUMBLED WORDS

- 1. marrow
- 2. tower
- 3. narrow
- 4. eyebrow
- 5. tomorrow

#### **ANALOGIES**

- 1. four
- 2. sun
- 3. elbow
- 4. beef
- 5. mouth

#### **YES OR NO QUESTIONS**

- 1. Y
- 2. N
- 3. Y
- 4. Y
- 5. N

#### WHAT AM I?

- 1. shadow
- 2. towel

#### **CIRCLE THE CORRECT WORD**

- 1. sink
- 2. narrow
- 3. hollow
- 4. tower
- 5. sow

#### **ODD ONE OUT**

- 1. fifty
- 2. dog
- 3. carrot
- 4. laboratory
- 5. Jupiter

#### **SYNONYMS**

- 1. location
- 2. size
- 3. ideal
- 4. opponent
- 5. emotion

#### ANTONYMS

- 1. rival
- 2. entertaining
- 3. final
- 4. pleasure
- 5. genuine

#### **REARRANGED WORDS**

- 1. The athlete was asked to <u>compete</u> in the Olympic Games
- 2. Susan's mother asked her to **<u>greet</u>** the guests at the door and take their coats.
- 3. George was feeling <u>lonely</u> and bored when he stayed home from school.
- 4. The horse began to **<u>gallop</u>** through the field, when he was set free.
- 5. Henry was being very <u>helpful</u> to his parents and washed the dishes.

#### WORD KNOWLEDGE

- 1. full of strength, energy, liveliness
- 2. to foretell the future; to say something will happen before the event occurs.
- 3. a wide street in a city, usually with trees along each side.

#### **IDIOMS**

- 1. c. exactly on time
- 2. e. to be speechless or in a state of uncertainty
- 3. a. a silly or foolish person
- 4. d. be ignored by others
- 5. b. have casual conversation

#### G.A TEST

- 1. 21
   2. (a)
   3. (c)
   4. (d)
   5. (a)
   6. (c) 2<sup>2</sup>-1, 3<sup>2</sup>-1,... 6<sup>2</sup>-1
   7. (a)
   8. (b)
   9. 16
   10. (d)
   11. 21, 4×5+1=21
   12. (c)
   13. (d) Food and water is scarce in desert areas.
- 14. (d)
- 15. (c)

### UNIT 2

#### WORD LIST

- 1. wafted
- 2. narrow
- 3. film
- 4. project
- 5. steady
- 6. instead
- 7. safe(r)
- 8. proud
- 9. notice
- 10. tremble
- 11. amaze(d)
- 12. nudge

#### "ea" FAMILY

- 1. break
- 2. meal
- 3. steal
- 4. already
- 5. breakfast

#### USING CLUES

- 1. breakfast
- 2. cheap
- 3. easy
- 4. great
- 5. steak
- 6. beautiful
- 7. leave
- 8. break
- 9. Easter
- 10. steal

#### JUMBLED WORDS

- 1. instead
- 2. breakfast
- 3. steak
- 4. beautiful
- 5. leave

#### **YES OR NO QUESTIONS**

- 1. **N**
- 2. **Y**
- 3. Y
- 4. N
- 5. Y

#### **CIRCLE WORDS**

- 1. Each
- 2. steak
- 3. beautiful
- 4. meal
- 5. instead

#### WHAT AM I?

- 1. cheap
- 2. breakfast

#### **ODD ONE OUT**

- 1. adult
- 2. three
- 3. tie
- 4. eggs
- 5. tuna

#### **SYNONYMS**

- 1. welcome
- 2. exist
- 3. pleasing
- 4. old
- 5. tale
- 6. chatter

#### **ANTONYMS**

- 1. b) impatience
- 2. d) careful
- 3. a) end
- 4. e) racket
- 5. c) move

#### WORD KNOWLEDGE

- 1. to have left one's country or region and to have settled in another.
- 2. obeying or willing to obey
- 3. a mark that detracts from appearance, as a pimple or a scar; defect or flaw or stain.

#### **PLURALS**

- 1. The **policemen** were eating <u>their donuts</u> in <u>their cars</u> when the <u>thieves</u> drove past.
- 2. My <u>friends</u> and I watched <u>movies</u> and played <u>games</u> last night.
- 3. The <u>babies were</u> crying in <u>their cribs</u>, while <u>their mothers were</u> sleeping in <u>their</u> <u>rooms</u>.

#### **CONFUSING PAIRS**

- 1. throne
- 2. bored
- 3. warn
- 4. pane
- 5. weather

#### **IDIOMS**

- 1. c. to be vulnerable or overcome by
- 2. b. to scold or tell off
- 3. d. to spoil someone's plans
- 4. e. to prevent someone from proceeding
- 5. a. in a moment

#### **G.A TEST**

- 1. (c)
- 2.22
- 3. (d)

- 4. (c)  $1^3$ ,  $2^3$ ,  $3^3$ ,  $4^3$ ,  $5^3$
- 5. (a)
- 6. (c)
- 7. (a)
- 8. (a)
- 9. (c)
- 10. (b) 5+13=9+9
- 11. (c) Seatbelts help to make travelling in a car safer.
- 12. (c)
- 13. (b)
- 14. (d)
- 15. (d)

### UNIT 3

#### WORD LIST

- 1. wound
- 2. jolt
- 3. stern
- 4. quilt
- 5. limp
- 6. sense
- 7. inspect
- 8. straight
- 9. shivers
- 10. faint
- 11. protect
- 12. loose

#### SILENT LETTERS

- 1. knock
- 2. tomb
- 3. sight
- 4. island
- 5. lamb

#### **USING CLUES**

- 1. thumb
- 2. gnaw
- 3. lamb
- 4. knob
- 5. sight
- 6. listen
- 7. island
- 8. knit
- 9. comb
- 10. knock

#### JUMBLED WORDS

- 1. knowledge
- 2. sign
- 3. gnaw
- 4. knock
- 5. listen

#### **YES OR NO QUESTIONS**

- 1. **Y**
- 2. N
- 3. Y
- 4. N
- 5. N

#### **CIRCLE WORDS**

- 1. lamb
- 2. knob
- 3. build
- 4. tomb
- 5. listen

#### **ANALOGIES**

- 1. teeth
- 2. sit
- 3. ancient
- 4. solid
- 5. vegetable

#### **ODD ONE OUT**

- 1. sand
- 2. forward
- 3. mild
- 4. sparrow
- 5. meringue

#### **SYNONYMS**

- 1. shake
- 2. thin
- 3. pleasing
- 4. request
- 5. haul
- 6. avoid

#### **ANTONYMS**

- 1. b) daring
- 2. c) unfair
- 3. d) climb
- 4. a) free
- 5. e) tacky

#### WORD KNOWLEDGE

- 1. raised or elevated, as in rank or character.
- 2. not having the necessary ability, qualification, or strength to perform some specified act or function.
- 3. a cloth, often made of or trimmed with lace, worn about the neck by men.

#### **CONFUSING PAIRS**

- 1. blue
- 2. border
- 3. veil
- 4. piece
- 5. hear

#### **IDIOMS**

- 1. c. having a good chance
- 2. a. no longer useful or desirable
- 3. d. done very easily
- 4. b. a change from what one is used to
- 5. e. be extremely angry or worried

#### G.A TEST

- 1. (b)
- 2. (a)
- 3. (d)  $+5, +10, +20, +40, + \dots$
- 4. (b)
- 5.33
- 6. (c)
- 7. (b)
- 8. (c) 9. 16
- 9.10 10 /h
- 10. (b) The donkey drank its/the water from the/its trough.
- 11. (d) (5, 5×3=15, (15-5) ×15=150)
- 12. (c)
- 13. (b)
- 14. (b)
- 15. (a)

#### WORD LIST

- 1. tidy
- 2. limit
- 3. alone
- 4. jeer(ed)
- 5. blaze
- 6. dangerous
- 7. exceeded
- 8. admire
- 9. useful
- 10. shuffle
- 11. disgust
- 12. slight

#### "oo" FAMILY

- 1. tool
- 2. shampoo
- 3. balloon
- 4. choose
- 5. smooth

#### **USING CLUES**

- 1. mushroom
- 2. choose
- 3. football
- 4. blood
- 5. spool
- 6. spoon
- 7. balloon
- 8. shampoo
- 9. tool
- 10. smooth

#### JUMBLED WORDS

- 1. bedroom
- 2. loose
- 3. shampoo
- 4. balloon
- 5. mushroom

#### **YES OR NO QUESTIONS**

- 1. **Y**
- 2. N
- 3. **Y**
- 4. **Y**
- 5. N

#### **CIRCLE WORDS**

- 1. spoon
- 2. shook
- 3. shampoo
- 4. loose
- 5. mushroom

#### WHAT AM I?

- 1. football
- 2. balloon

#### ODD ONE OUT

- 1. exciting
- 2. plain
- 3. make
- 4. harmless
- 5. always

#### **SYNONYMS**

- 1. recover
- 2. colour
- 3. find
- 4. wake
- 5. stream
- 6. damage

#### ANTONYMS

- 1. b) grow
- 2. c) joyous
- 3. e) talkative
- 4. a) lying
- 5. d) obedient

#### WORD KNOWLEDGE

- 1. lacking sense, significance, or ideas; silly.
- 2. destruction; confusion; chaos.
- 3. sadness; gloominess

#### **PLURALS**

- 1. The <u>pizzas</u> the <u>girls</u> ate, <u>were</u> so delicious that <u>they</u> called up <u>their friends</u> and told <u>them</u> about it.
- 2. The hungry **wolves** watched the **groups** of sheep in the **fields** and waited hungrily for the right time to make an attack.
- 3. The little <u>girls</u> danced around the <u>trees</u> with <u>their friends</u> on the <u>weekends</u>.

#### **CONFUSING PAIRS**

- 1. wood
- 2. whine
- 3. war
- 4. thyme
- 5. tax

#### **IDIOMS**

- 1. c. take the cautious risk free approach
- 2. e. to be very obvious
- 3. d. truthfully or honestly
- 4. a. lasting only a short while
- 5. b. to keep or maintain respect

#### G.A TEST

- 1. (a) 2. (c) 3. (a) 4. (d) 5. (d)  $+4, +8, +16, +32, +\ldots$ 6. (c) (fruit) 7. (c)  $(3 \times 9) + 25 = 52, 52 \div 4 = 13$ 8. (b) 9. (c) 10. (b) 11.22  $(13-2)x^2 = 22$ 12. (c) 13. (a) 14. (a)
- 14. (a) 15. (d)
- UNIT 5

#### WORD LIST

- 1. growl
- 2. squeeze
- 3. slumped
- 4. pierce(d)
- 5. wicked
- 6. habit
- 7. broad
- 8. fierce
- 9. filthy
- 10. thrash
- 11. greedy
- 12. crouch(ed)

#### "ch" FAMILY

- 1. Christmas
- 2. chance
- 3. kitchen
- 4. champion
- 5. chew

#### **USING CLUES**

- 1. coach
- 2. ache
- 3. Christmas
- 4. crunch
- 5. chew
- 6. kitchen
- 7. champion
- 8. punch
- 9. church
- 10. speech

#### JUMBLED WORDS

- 1. coach
- 2. punch
- 3. challenge
- 4. chance
- 5. church

#### YES OR NO QUESTIONS

- 1. **Y**
- 2. N
- 3. N
- 4. N
- 5. Y

#### **CIRCLE WORDS**

- 1. champion
- 2. punch
- 3. chase
- 4. batch
- 5. ache

#### **ANALOGIES**

- 1. sow
- 2. lamb
- 3. repaired
- 4. six
- 5. letters

#### **ODD ONE OUT**

- 1. penniless
- pennics
   overalls
- 3. heart
- 4. dory
- 5. violin

#### **SYNONYMS**

- 1. unwilling
- 2. move
- 3. pleasing
- 4. sacred
- 5. sprint
- 6. reside

#### **ANTONYMS**

- 1. c) enlarge
- 2. d) patience
- 3. e) persist
- 4. a) strong
- 5. b) attractive

#### WORD KNOWLEDGE

- 1. hard to please; excessively particular, critical, or demanding
- 2. small, exclusive groups of people
- 3. overfilled or overcrowded

#### **PLURALS**

- 1. The <u>men</u> threw the <u>balls</u>, into the <u>fields</u> and whilst <u>they were</u> looking for <u>them</u>, <u>they</u> fell into <u>some</u> rabbit <u>holes</u>.
- "Could you please throw the rotten tomatoes and cherries into the garbage bins and take them outside," asked mother.
- 3. The cute <u>babies</u> were eating <u>their</u> <u>sandwiches</u> and playing with <u>their toys</u>.

#### **CONFUSING PAIRS**

- 1. heel
- 2. Our
- 3. ball
- 4. creek
- 5. yolk

#### **IDIOMS**

- 1. e. to give up or withdraw
- 2. d. left alone and given no help at all
- 3. a. get out of bed full of energy

- 4. b. how things turn out
- 5. c. being very successful

#### G.A TEST

- 1. (a)
- 2.(c)
- 3. (d)
- 4. (b) 5. (d)

#### 6. (d) 1×2=2, 2×3=6, 6×4=24, 24×5=120

- 7. (a) 8. (d)
- 9. 16
- 10. (c)
- 11. (c)
- 12. (a)
- 13. (c)
- 14. (a)
- 15. (d) He is a very cautious <u>man</u>.

# UNIT 6

#### WORD LIST

- 1. comfort
- 2. warn
- 3. hush
- 4. rear
- 5. forth
- 6. tease
- 7. remain
- 8. stain
- 9. dread
- 10. tumble(d)
- 11. sway
- 12. snarled

#### "er" FAMILY

- 1. teacher
- 2. number
- 3. stranger(s)
- 4. thunder
- 5. damper

#### **USING CLUES**

- 1. thunder
- 2. teacher
- 3. blunder
- 4. enter

- 5. newspaper
- 6. number
- 7. computer
- 8. pamper
- 9. damper
- 10. underground

#### JUMBLED WORDS

- 1. underground
- 2. pamper
- 3. stranger
- 4. corner
- 5. never

#### **YES OR NO QUESTIONS**

- 1. N
- 2. N
- 3. **Y**
- 4. N
- 5. N

#### CIRCLE WORDS

- 1. enter
- 2. newspaper
- 3. blunder
- 4. teacher
- 5. wonder

#### WHAT AM I?

- 1. newspaper
- 2. stranger

#### ODD ONE OUT

- 1. miniscule
- 2. wicked
- 3. document
- 4. crab
- 5. weed

#### **SYNONYMS**

- 1. overhear
- 2. noise
- 3. wrongdoing
- 4. ally
- 5. continue
- 6. reject

#### **ANTONYMS**

- 1. e) commend
- 2. a) sweet
- 3. d) command

- 4. b) dishonest
- 5. c) continue

#### WORD KNOWLEDGE

- 1. extremely talkative
- 2. a usually small and relatively inexpensive article given, kept, or purchased as a reminder of a place visited, an occasion, etc.; memento.
- 3. without regard to something else, esp. something specified; ignoring.

#### PLURALS

- 1. The <u>foxes</u> ate the <u>rats</u>, and then retired away back into <u>their dens</u>.
- 2. My <u>hands</u> and <u>fingers</u> were aching badly, after spending all day trying to catch <u>crabs</u>.
- 3. The <u>families</u>, set up their <u>picnics</u>, on the top of the <u>hills</u> next to the <u>lakes</u>.

#### **CONFUSING PAIRS**

- 1. berry
- 2. by
- 3. cell
- 4. bait
- 5. wine

#### **IDIOMS**

- 1. b. at running speed
- 2. d. to irritate a person
- 3. e. thirteen
- 4. a. without support
- 5. c. pretend not to notice

#### G.A TEST

- 1. (c) 2. (c)
- 2. (c) 3. (a)
- 4. (d)
- 5. (b)  $(7+1) \times 7 = 56$
- 6. (b)
- 7. (b)
- 8. (a)
- 9. (b)
- 10. (d) 11. (a)
- 11. (d) 12. (d)
- 13.40 (19+1) ×2=40

14. (b)

15. (d) He spoke three languages <u>fluently</u>.

#### WORD LIST

- 1. contain
- 2. wistful(ly)
- 3. mischief
- 4. desolate
- 5. overwhelm
- 6. emerge
- 7. luminous
- 8. immediately
- 9. miserable
- 10. peculiar
- 11. Mildew
- 12. brute

#### **"OR" FAMILY**

- 1. mirror
- 2. doctor
- 3. work
- 4. comfortable
- 5. actor

#### **USING CLUES**

- 1. tractor
- 2. actor
- 3. tailor
- 4. forget
- 5. work
- 6. mirror
- 7. bored
- 8. worse
- 9. world
- 10. doctor

#### JUMBLED WORDS

- 1. comfortable
- 2. tailor
- 3. report
- 4. worth
- 5. bored

#### TRUE OF FALSE?

- 1. F
- 2. T
- 3. T
- 4. F
- 5. T

#### WHAT AM I?

- 1. tractor
- 2. tailor

#### **CIRCLE THE CORRECT WORD**

- 1. world
- 2. doctor
- 3. tailor
- 4. report
- 5. worse

#### ODD ONE OUT

- 1. brave
- 2. wood
- 3. chest
- 4. metal
- 5. New Zealand

#### **SYNONYMS**

- 1. shy
- 2. slim
- 3. dirt
- 4. achieve
- 5. pair

#### ANTONYMS

- 1. slavery
- 2. dawdle
- 3. horrid
- 4. scowl
- 5. publicity

#### **REARRANGED WORDS**

- 1. continued
- 2. calculate
- 3. rehearse
- 4. prawns
- 5. cereal

#### WORD KNOWLEDGE

- 1. <u>foliage</u> leaves on a plant.
- 2. <u>mozzarella</u> a type of cheese.
- 3. <u>stethoscope</u> a doctor's tool used to hear a patient's heart beat.

#### **IDIOMS**

- 1. b. approach a task gradually or carefully
- 2. d. as seen from above
- 3. e. go for a short walk

- 4. a. retain respect
- 5. c. having many interests at the same time

#### **G.A TEST**

- 1. c
- 2. potion
- 3.8 4.b
- 4. 0 5. d
- 5. u 6. a
- 7. dame  $\rightarrow$  game
- 8. b
- 9. d
- 10.67
- 11. taste
- 12. c
- 13. d
- 14. a
- 15. K

# **UNIT 8**

#### WORD LIST

- 1. purpose
- 2. quality
- 3. extraordinary
- 4. vanish
- 5. ridiculous
- 6. absolute
- 7. despair
- 8. suggest
- 9. ought
- 10. hideous
- 11. Marvellous
- 12. frantic

#### "AI" FAMILY

- 1. plain
- 2. fountain
- 3. maintain
- 4. upstairs
- 5. drain

#### **USING CLUES**

- 1. available
- 2. plain
- 3. drain

- 4. fountain
- 5. certain
- 6. stain
- 7. explain
- 8. upstairs
- 9. captain
- 10. against

#### JUMBLED WORDS

- 1. certain
- 2. available
- 3. curtain
- 4. repair
- 5. bargain

#### **TRUE OF FALSE?**

- 1. T
- 2. F
- 3. F
- 4. T
- 5. F

#### **CIRCLE WORDS**

- 1. certain
- 2. available
- 3. fountain
- 4. bargain
- 5. stain

#### WHAT AM I?

- 1. drain
- 2. captain

#### **ODD ONE OUT**

- 1. truck
- 2. sing
- 3. tractor
- 4. Tokyo
- 5. sit

#### **SYNONYMS**

- 1. search
- 2. rerun
- 3. wreck
- 4. flare
- 5. cruise
- 6. savage

#### **ANTONYMS**

- 1. b. heavy
- 2. d. show
- 3. e. slow
- 4. c. clash
- 5. a. sweet

#### WORD KNOWLEDGE

- 1. tranquil quiet, peaceful.
- 2. jubilant happy, ecstatic.
- 3. <u>lavish</u> extravagant, a lot.

#### **PLURALS**

- 1. The <u>chefs</u> sent <u>faxes</u>, to <u>their cousins</u>, to inform <u>them</u> that the <u>geese</u> had been cooked.
- 2. The <u>teachers</u> sent the <u>boys</u> outside the <u>rooms</u> and said " Come back in once you've straightened <u>yourselves</u> out."
- 3. The **boys** and **girls** held hands and walked through the **fields**, where they saw **wolves**.

#### **CONFUSING PAIRS**

- 1. build
- 2. currants
- 3. prey
- 4. cellar
- 5. guessed

#### **IDIOMS**

- 1. d.
- 2. e.
- 3. b.
- 4. c.
- 5. a.

#### G.A TEST

- 1. c
- 2. b (Fiona)
- 3. b
- 4. a) occasion
  - b) thermometer
  - c) poultry
  - d) government
- 5. d
- 6. a
- 7. d
- 8. 20,  $(12+28) \div 2 = 20$
- 9. b
- 10. a

- 11. c
  12. crescent → present
  13. A, H, I, M, O, T, U, V, W, X, Y
  14. d
- 15. c

# UNIT 9

#### WORD LIST

- 1. murky
- 2. glimpse
- 3. declare
- 4. recline
- 5. slight
- 6. cautious
- 7. tremendous
- 8. mysterious
- 9. inspect
- 10. midget
- 11. nuisance
- 12. bittersweet

#### **"Y" FAMILY**

- 1. Italy
- 2. ordinary
- 3. family
- 4. grumpy
- 5. duty

#### USING CLUES

- 1. extraordinary
- 2. city
- 3. family
- 4. empty
- 5. hungry
- 6. Italy
- 7. ordinary
- 8. pretty
- 9. busy
- 10. grumpy

#### JUMBLED WORDS

- 1. ordinary
- 2. extraordinary
- 3. empty
- 4. grumpy
- 5. Probably

#### **TRUE OF FALSE?** 5. knows 1. T 2. T 3. F 4. T 5. T CIRCLE WORDS 1. extraordinary 2. city 3. hungry $1.2\frac{1}{2}$ 4. busy 5. Suddenly 2. b WHAT AM I? 3. c 1. Italy 2. ordinary 5. b 6. ideas **ODD ONE OUT** 7. d 1. milk 8. c 9. a 2. water 3. head 10.10 4. basketball 5. seventeen 12. d <u>SYNONYMS</u> 13. a 14. c 1. mix15. a) way 2. thought 3. concert 4. break 5. devour 6. area

#### **ANTONYMS**

- 1. d. cheap
- 2. a. gloomy
- 3. c. corrupt
- 4. e. present
- 5. b. ordinary

#### WORD KNOWLEDGE

- 1. edible possible to be eaten.
- 2. <u>hygiene</u> cleanliness, sanitation.
- 3. <u>octet</u> a band of eight musical instruments/ people.

#### **CONFUSING PAIRS**

- 1. horse
- 2. dessert
- 3. board

#### 4. Russia

#### **IDIOMS**

- 1. c. be quick witted
- 2. d. to exercise with weights
- 3. e. to act quickly, and energetically
- 4. b. available and ready to use
- 5. a. an ancient but untrue story

#### G.A TEST

- 4. parcel  $\rightarrow$  castle 11. a) steel b) piece

  - b) never

# **UNIT 10**

#### WORD LIST

- 1. famished
- 2. wither
- 3. splendid
- 4. bother
- 5. hysterics
- 6. scornful
- 7. intent
- 8. primly
- 9. behold
- 10. murmur
- 11. approval
- 12. Meanwhile

#### **"EY" FAMILY**

- 1. eyewitness
- 2. chimney
- 3. money
- 4. storey
- 5. obey

#### **USING CLUES**

- 1. kidney
- 2. donkey
- 3. honey
- 4. Sydney
- 5. chimney
- 6. key
- 7. eyes
- 8. storey
- 9. valley
- 10. obey

#### JUMBLED WORDS

- 1. eyewitness
- 2. honey
- 3. chimney
- 4. valley
- 5. eyepiece

#### TRUE OF FALSE?

- 1. F
- 2. T
- 3. F
- 4. F
- 5. F

#### **CIRCLE WORDS**

- 1. obey
- 2. donkey
- 3. kidney
- 4. valley
- 5. eyewitness

#### WHAT AM I?

- 1. chimney
- 2. Sydney

#### **ODD ONE OUT**

- 1. wrong
- 2. catch
- 3. lose
- 4. sand

#### 5. warm

#### **SYNONYMS**

- 1. sliver
- 2. barb
- 3. benefit
- 4. compact
- 5. gala
- 6. gain

#### ANTONYMS

- 1. e. expansive
- 2. d. straight
- 3. a. adult
- 4. b. smooth
- 5. c. death

#### WORD KNOWLEDGE

- 1. cistern a tank for storing water, esp. as part of a toilet.
- 2. quarantine a period of isolation for protection from disease.
- 3. manger a box or trough in a stable or barn from which horses or cattle eat

#### **CONFUSING PAIRS**

- 1. thyme
- 2. weight
- 3. worn
- 4. cheque
- 5. vein

#### PLURALS

1. The <u>mice</u> in the <u>libraries</u> scared the <u>families</u> and they ran outside into the <u>parks</u>.

2. The **boys** and **their dogs**, walked through the

streets and heard babies crying in the houses.

3. The <u>leaves</u> began to turn brown as <u>they were</u> left on the **tables** for too long.

#### IDIOMS

- 1. d. to make something important
- 2. e. to reduce by a significant amount
- 3. a. be well informed
- 4. b. become insane or go mad
- 5. c. to avoid answering someone's questions

#### G.A TEST

- 1. innings 2. a 3. b 4. c 5. d 6. b 7. 29
- 8. a
- 9. ring
- 10. b
- 11.16
- 12. a
- 13. d (Swedes)
- 14. c



# Essential Mathematics

# ANSWERS

# Term 1

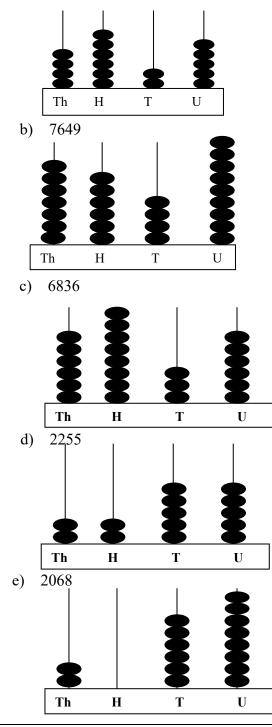
# YEAR 3

#### Number to 9999

| 1. | a) | 1228 | b) 1314 |
|----|----|------|---------|
|    | c) | 2232 | d) 2307 |
| 2. | a) | 1533 | b) 1621 |
|    | c) | 1203 | d) 1067 |
|    | e) | 1101 | f) 1233 |

#### **Place Value**

- 1. 2, 3, 4, 6
- 2. a) 4625



- 3. 4 thousands a)
  - c) 9 hundreds
  - 3 tens e)
  - 5 hundreds g) i) 7 tens
- 1 Unit 9 thousands f)

8 hundreds

h) 2 tens

b)

d)

j) 6 units

| 4. | Thousands | Hundreds | Tens | Units |
|----|-----------|----------|------|-------|
| a) | 7         | 3        | 4    | 8     |
| b) | 0         | 3        | 8    | 1     |
| c) | 2         | 9        | 3    | 5     |
| d) | 1         | 0        | 0    | 7     |
| e) | 0         | 0        | 8    | 6     |

#### **Expanded Notation**

- 2000, 600, 90, 7 1. a)
  - b) 5000, 200, 80, 1
  - 1000, 100, 70, 0 c)
  - d) 1000, 0, 20, 3
  - 8000, 400, 90, 2 e)
  - f) 4659
  - 3491 g)
  - 1928 h)
  - i) 1364 567 i)
  - 820 k)

#### **Ordering Numbers**

| 1. | a) | 8507, 7503, 5073, 2057 |
|----|----|------------------------|
|    | b) | 3658, 2800, 2654, 1888 |
|    | c) | 8463, 3541, 2707, 2657 |
|    | 4) | 5774 4577 2674 2452    |

- 5234, 4532, 3624, 2453 d)
- 2. 732 1284 a) **b**) d) 4174 c) 869 e) 2753
- 3. 6354, 6425, 6453, 6534, 6542 a) b) 8054, 8405, 8450, 8504, 8540 3026, 3206, 3260, 3602, 3620 c)
- 4. a) 653 b) 9760 7531 c) 5432 d) 5. 3669 a) 4567 b) 2477 d) 3679 c)

#### **Rounding Off**

| 1. | a)<br>b) | 274, 263, 298,<br>473, 487, 542,        |  |                     |
|----|----------|---|--|---------------------|
| 2. |          | 200<br>300<br>3000                      | b)<br>d)<br>f)   | 600<br>1200<br>6400 |
| 3. | e)       | 70<br>120<br>260<br>430<br>500          | f)   | 1130                |
| 4. |          | 200<br>100<br>200<br>100<br>300<br>True | <ul> <li>b)</li> <li>d)</li> <li>f)</li> <li>h)</li> <li>j)</li> <li>b)</li> </ul> | 1000<br>1600<br>300 |
|    | c)       | True                                    | d)   | True                |

e) False

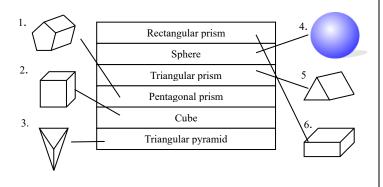
#### **Quick Questions**

A:

5.

- 1. 700
- 2. 652
- 3. thousands
- 4. 15
- 5. 23
- 6. 29
- 7. three hundred and twenty-six
- 8. 11, 348, 615
- 9. 5000+400+10+1
- 10. 5763

B:



- C: 1. 3819, 6721, 8924 2. 2487, 2635, 2711 3. 111, 385, 907 4. 7621, 7921, 8051 5. 1213, 2148, 2968
  - 6. 8110, 8376, 8428

### UNIT 2

#### **Adding Facts**

1.

| 2  | 3  | 4  | 6  | 7  | 8  | 9  | 10 | 11 | 12 |
|----|----|----|----|----|----|----|----|----|----|
| 3  | 4  | 5  | 7  | 8  | 9  | 10 | 11 | 12 | 13 |
| 4  | 5  | 6  | 8  | 9  | 10 | 11 | 12 | 13 | 14 |
| 6  | 7  | 8  | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 7  | 8  | 9  | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| 8  | 9  | 10 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| 9  | 10 | 11 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
| 11 | 12 | 13 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 12 | 13 | 14 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |

#### **Addition Strategies**

|    |    |    | - |    |    |
|----|----|----|---|----|----|
| 1. | a) | 18 |   | b) | 19 |
|    | c) | 18 |   | d) | 19 |
|    | e) | 16 |   | f) | 19 |
|    | g) | 17 |   | h) | 29 |
|    |    |    |   |    |    |
| 2. | a) | 24 |   | b) | 32 |
|    | c) | 48 |   | d) | 28 |
|    | e) | 36 |   | f) | 68 |
|    | g) | 84 |   | h) | 50 |
|    | i) | 44 |   | j) | 90 |
|    |    |    |   |    |    |

#### **Jump Strategies**

|    | -  | -                |
|----|----|------------------|
| 1. | b) | 26 + 50 + 4 = 80 |
|    | c) | 77 + 10 + 6 = 93 |
|    | d) | 48 + 20 + 4 = 72 |
|    | e) | 54 + 20 + 6 = 80 |
|    | f) | 47 + 20 + 5 = 72 |
|    | g) | 42 + 30 + 5 = 77 |

h) 67 + 20 + 4 = 91

#### **Quick Questions**

- A:
- 1. 39
- **2.** 15
- 627
   3
- **5.** 859
- **6.** 10
- **7.** 31
- **8.** 60
- **9.** 6
- **10.** 9

#### B:

| 100 Less | Number | 100 more |
|----------|--------|----------|
| 400      | 500    | 600      |
| 350      | 450    | 550      |
| 721      | 821    | 921      |
| 663      | 763    | 863      |
| 130      | 230    | 330      |
| 469      | 569    | 669      |

#### **C**:

- **1.** 93
- **2.** 50
- **3.** 36
- **4.** 59

# UNIT 3

b.

d.

- 1. (Clockwise)
  - **a.** 12, 5, 0, 8, 9, 9, 7, 9
  - **b.** 3, 8, 9, 7, 2, 13, 1, 0 **c.** 6, 10, 3, 9, 0, 7, 2, 8
  - $\vdots, 0, 10, 5, 9, 0, 7, 2,$
- 2. a.

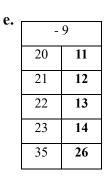
c.

| -  | 6  |
|----|----|
| 10 | 4  |
| 12 | 6  |
| 14 | 8  |
| 16 | 10 |
| 18 | 12 |

| -  | 5  |
|----|----|
| 10 | 5  |
| 12 | 7  |
| 14 | 9  |
| 16 | 11 |
| 23 | 18 |

| -  | 7  |
|----|----|
| 15 | 8  |
| 16 | 9  |
| 17 | 10 |
| 18 | 11 |
| 24 | 17 |

| -  | 8  |
|----|----|
| 18 | 10 |
| 19 | 11 |
| 20 | 12 |
| 21 | 13 |
| 32 | 24 |



#### **Subtraction Strategies**

- **1 a.** 6(90-30=60)
  - **b.** 2 ( 90 70 = 20)
  - **c.** 5(80-30=50)**d.** 3(70-40=30)
  - e. 5(90-40=50)
  - **f.** 3 (80 50 = 30)
  - **g.** 4 (60 20 = 40)
  - **h.** 1 ( 50 40 = 10)
  - i. 2(80-60=20)
  - **j.** 2 ( 70 50 = 20)

| Ju | mp \$    | Strategies    |          |            |             |            |    | 4.       | 68         |                              |
|----|----------|---------------|----------|------------|-------------|------------|----|----------|------------|------------------------------|
| 2  | a.       | 24            | b.       | 35         |             |            |    | 5.       | 59         |                              |
|    | c.       | 22            | d.       | 42         |             |            |    | 6.<br>7  | 3<br>8     |                              |
|    | e.       | 51            | f.       | 68         |             |            |    | 7.<br>8. | o<br>58    |                              |
| Tv | vo-di    | igit Subtra   | ictio    | n          |             |            |    | 9.       | 92         |                              |
| 1  | a.       | 43            | b.       | 10         | <b>c.</b>   | 27         |    | 10.      | 280        |                              |
|    | d.       |               |          | 34         |             | 42         | C: |          |            |                              |
|    | g.       | 31            | h.       | 24         | <b>i.</b> 3 | 31         | a. | a)       | 2 4        |                              |
| 2  | a.       | 9             | b.       | 9          | c.          | 9          |    | -        | 1 3        | + 1 3                        |
|    | d.       |               |          | 6          |             | 3          |    |          | 1 1        | $ \frac{1}{2}$ $\frac{3}{4}$ |
|    | g.       | 27            | h.       | 17         | <b>i.</b> 2 | 23         |    |          | 1 1        |                              |
| Th | ree-     | digit Subt    | racti    | ion        |             |            | L  | 1.)      | 1 6        |                              |
| 1  | a.       | 414           | b.       | 161        | c.          |            | b. | b)       | 4 6<br>3 4 |                              |
|    | d.       | 402<br>662    | е.<br>ь  | 111        | f.<br>i.    | 386<br>835 |    | -        |            | + 3 4                        |
|    | g.       | 002           | h.       | 435        | Ι.          | 833        |    |          | 1 2        | 4 6                          |
| 2  | a.       | 479           | b.       | 346        | c.          | 732        |    |          |            |                              |
|    | d.       | 658           | e.       | 616        | f.          |            | c. | c)       | 39         |                              |
|    | g.       | 369           | h.       | 639        | i.          | 565        |    | -        | 1 7        | + 1 7                        |
| 3  | a.       | 274           | b.       | 293        | c.          | 483        |    |          | 2 2        | $- \underline{ 39}$          |
| 5  | d.       | 285           | e.       | 152        | f.          |            |    |          |            | <b>3</b> 9                   |
|    | g.       | 182           | h.       | 796        | i.          | 581        | d. |          |            |                              |
|    |          | <b>5</b> 00   |          | 276        |             | 150        | u. | 1)       | 2 2        |                              |
| 4  | a.<br>d. | 588<br>278    | b.<br>e. | 376<br>356 | с.<br>f.    | 159<br>895 |    | d)       | 3 2        |                              |
|    | u.<br>g. | 86            | с.<br>h. | 574        | i.          | 268        |    | -        | 9          | + 9                          |
|    | 0        |               |          |            |             |            |    |          | 2 3        |                              |
| 5  | a.       | 128           | b.       | 39         | c.          |            |    |          |            |                              |
|    | d.       | 10            | e.       | 621        | f.          | 845        |    |          |            |                              |
| Qı | ıick     | Questions     |          |            |             |            |    |          |            |                              |
| A: |          |               |          |            |             |            |    |          |            |                              |
|    | 1.       | 3:00          |          |            |             |            |    |          |            |                              |
|    | 2.       | 366           |          |            |             |            |    |          |            |                              |
|    | 3.<br>4. | 10<br>5       |          |            |             |            |    |          |            |                              |
|    | 5.       | 58            |          |            |             |            |    |          |            |                              |
|    | 6.       | 25            |          |            |             |            |    |          |            |                              |
|    | 7.       | 11am          |          |            |             |            |    |          |            |                              |
|    | 8.<br>9. | 6<br>35       |          |            |             |            |    |          |            |                              |
|    |          | . Summe       | r        |            |             |            |    |          |            |                              |
|    |          |               |          |            |             |            |    |          |            |                              |
| B: | 4        | 7             |          |            |             |            |    |          |            |                              |
|    | 1.<br>2. | 7<br><b>7</b> |          |            |             |            |    |          |            |                              |
|    | 2.<br>3. | 7<br>98       |          |            |             |            |    |          |            |                              |
|    | υ.       | 20            |          |            |             |            | 1  |          |            |                              |

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**UNIT** 4

| ×  | 0 | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10  |
|----|---|----|----|----|----|----|----|----|----|----|-----|
| 0  | 0 | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0   |
| 1  | 0 | 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10  |
| 2  | 0 | 2  | 4  | 6  | 8  | 10 | 12 | 14 | 16 | 18 | 20  |
| 3  | 0 | 3  | 6  | 9  | 12 | 15 | 18 | 21 | 24 | 27 | 30  |
| 4  | 0 | 4  | 8  | 12 | 16 | 20 | 24 | 28 | 32 | 36 | 40  |
| 5  | 0 | 5  | 10 | 15 | 20 | 25 | 30 | 35 | 40 | 45 | 50  |
| 6  | 0 | 6  | 12 | 18 | 24 | 30 | 36 | 42 | 48 | 54 | 60  |
| 7  | 0 | 7  | 14 | 21 | 28 | 35 | 42 | 49 | 56 | 63 | 70  |
| 8  | 0 | 8  | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80  |
| 9  | 0 | 9  | 18 | 27 | 36 | 45 | 54 | 63 | 72 | 81 | 90  |
| 10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

Yellow- 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100

Blue – 10, 20, 30, 40, 50, 60, 70, 80, 90,100 Green- 9, 18, 27, 36, 45, 54, 63, 72, 81, 90

Red-6, 12, 18, 24, 30, 36, 42, 48, 54,60, 66, 72,78, 84, 90, 96

Refer to Multiplication grid above

#### **Multiplication Tables** :×7

1.

| 1 ×7 = | 7  | $2 \times 7 = 14$  |
|--------|----|--------------------|
| 3 ×7 = | 21 | 4 ×7 = 28          |
| 5 ×7 = | 35 | $6 \times 7 = 42$  |
| 7 ×7 = | 49 | $8 \times 7 = 56$  |
| 9 ×7 = | 63 | $10 \times 7 = 70$ |

**2 a.**  $7 \times 6 = 42$ **b.**  $7 \times 8 = 56$ **c.**  $5 \times 7 = 35$ **d.**  $7 \times 7 = 49$ 

#### **Multiplication Tables : ×11**

| -                    |
|----------------------|
| $1 \times 11 = 11$   |
| 2 ×11 = 22           |
| $3 \times 11 = 33$   |
| $4 \times 11 = 44$   |
| 5 × 11= 55           |
| $6 \times 11 = 66$   |
| $7 \times 11 = 77$   |
| $8 \times 11 = 88$   |
| 9 × 11=99            |
| $10 \times 11 = 110$ |
|                      |

1.

**a.**  $2 \times 11 = 11 \times 2 = 22$ **b.**  $4 \times 11 = 11 \times 4 = 44$ **c.**  $8 \times 11 = 11 \times 8 = 88$ **d.**  $7 \times 11 = 11 \times 7 = 77$ **e.**  $6 \times 11 = 11 \times 6 = 66$ **f.**  $3 \times 11 = 11 \times 3 = 33$ **g.**  $10 \times 11 = 11 \times 10 = 110$ 

#### 2.

**a.** 4 ×11= 44 **b.** 8 ×11= 88 **c.** 7 ×11= 77 **d.** 9 ×11= 99

#### 3.

| a. | 77 | b. | 110 |
|----|----|----|-----|
| c. | 66 | d. | 88  |
| e. | 33 | f. | 55  |

**4.** (Following the track):

7, 63, 42, 33, 88, 70, 11, 49, 0, 110, 77, 0, 14, 28, 22, 66, 35, 21

5.

|     | 3  | 7  | 4  | 5  | 2  | 10  | 6  | 9  | 8  |
|-----|----|----|----|----|----|-----|----|----|----|
| ×7  | 21 | 49 | 28 | 35 | 14 | 70  | 42 | 63 | 56 |
| ×11 | 33 | 77 | 44 | 55 | 22 | 110 | 66 | 99 | 88 |

36, 24, 12

108

#### **Multiplication Tables: ×12**

|          |       | 1.   |      | -  |                |    |  |          |    |
|----------|-------|------|------|----|----------------|----|--|----------|----|
| 1        | ×     | 12   | = 1  | 2  |                |    |  |          |    |
| 2        | ×     | 12   | = 2  | 4  |                |    |  |          |    |
| 3        | ×     | 12   | = 3  | 6  |                |    |  |          |    |
| 4        | ×     | 12   | = 4  | 8  |                |    |  |          |    |
| 5        | ×     | 12   | = 6  | 0  |                |    |  |          |    |
| 6        | ×     | 12   | = 7  | 2  |                |    |  |          |    |
| 7        | ×     | 12   | = 8  | 4  |                |    |  |          |    |
| 8        | ×     | 12   | = 9  | 6  |                |    |  |          |    |
| 9        | ×     | 12   | = 1  | 08 |                |    |  |          |    |
| 10       | ) x [ | 12 : | = 12 | 20 |                |    |  |          |    |
| 1.<br>2. | ```   |      |      | 0  | om to<br>6, 84 | -  |  |          |    |
|          | a.    | 24   | 1    |    | b.             | 48 |  | c.       | 72 |
|          | d.    | 9    | -    |    | e.             |    |  | с.<br>f. | 10 |
|          | g.    | 84   |      |    | h.             | 60 |  |          |    |
|          |       |      |      |    |                |    |  |          |    |

3. 5. 48 12 × 3 = 36 6. Four hundred and four a. 12  $\times 5 = 60$ 7. 103 b. 12  $\times$  7 = 84 8. 69 c. 12 9. **Multiples and Factors** 10. 14 1. 66 B: 35 b. 40 a. c. 1. 72 d. 60 36 f. e. 7 8 9 10 77 20 36 h. i. × g. 90 j. 2 14 16 18 20 2. 2. **a.** 1, 2, 4, 8 **b.** 1, 3, 5, 15 **c.** 1, 2, 3, 4, 6, 12 **d.** 1, 2, 4, 5, 10,20 3 4 5 6 × **e.** 1, 2, 4, 8, 16 4 16 12 20 24 3. **a.** 14, 28, 7, 42, 21, 35 3. **b.** 21, 49, 63, 56 9 10 × 5 8 4. 8 72 80 40 64 a. 14, 21, 28, 35, 42, 49, 56, 63 **b.** 10, 15, 20, 25, 30, 35, 40, 45 **c.** 18, 27, 36, 45, 54, 63, 72, 81 4. **d.** 8, 12, 16, 20, 24, 28, 32, 36 3 6 5 4 × e. 6, 9, 12, 15, 18, 21, 24, 27 **f.** 24, 36, 48, 60, 72, 84, 96, 108 6 18 36 30 24 **Square Numbers** 5. 1. Coloured: 1, 4, 9, 25, 36, 49, 64, 81, 100 2 8 7 10 × The extended multiplication algorithm 7 14 70 49 56 1. 60 **b.** 92 a. 6. 145 d. 81 c. 114 × 3 7 4 8 e. 12 36 84 48 96 **Short Multiplication** 1. 135 75 b. a. 198 184 d. c. 306 **e.** 266 f. 216 352 h. g. 324 i. **Quick Questions** A: \$3 1. 56 2. hundreds 3. 4. 0

4

## UNIT 5

|      |  | 6 = 5  | ~.  | $12 \div 3 = 15 \div 5 = 3$   |
|------|--|--|---|---|
| c.   | 10   |  |   |   |
|      |  |  |   |   |
| visi | on fac   | ts from m  | ultipl  | ication   |
| a.   | 12   | (12÷2=6  | )   |   |
| b.   | 27   | (27 ÷3=9   | )   |   |
| c.   | 20   | (20÷4=5  | )   |   |
| d.   | 24   | (24 ÷6=4   | )   |   |
| e.   | 40   | (40÷8=5  | )   |   |
|      | c.<br>a.<br>c.<br>e.<br>a.<br>c.<br>b.<br>c.<br>d. | <ul> <li>a. 20</li> <li>c. 10</li> <li>e. 4</li> <li>a. 8</li> <li>c. 12</li> <li>vision face</li> <li>a. 12</li> <li>b. 27</li> <li>c. 20</li> <li>d. 24</li> </ul> | c. $30 \div 6 = 5$<br>a. 20 b.<br>c. 10 d.<br>e. 4<br>a. 8 b.<br>c. 12 d.<br>vision facts from ma<br>a. 12 (12 ÷ 2=6)<br>b. 27 (27 ÷ 3=9)<br>c. 20 (20 ÷ 4=5)<br>d. 24 (24 ÷ 6=4) | c. $30 \div 6 = 5$ d.<br>a. 20 b. 2<br>c. 10 d. 5<br>e. 4<br>a. 8 b. 4<br>c. 12 d. 3<br>vision facts from multipl<br>a. 12 (12 ÷ 2=6)<br>b. 27 (27 ÷ 3=9)<br>c. 20 (20 ÷ 4=5)<br>d. 24 (24 ÷ 6=4) |

(72÷9=8)

g. 110 (110÷11=10)
2 a. i) 20, 20 ii) 4, 4 iii) 5, 5

**f.** 72

- **b.** i) 24, 24 ii) 3, 3 iii) 8, 8
- c. i) 18, 18 ii) 9, 9 iii) 2, 2
  3. a. 5 b. c. 7 d.

77

e.

4.

| a. |   |    | b. |
|----|---|----|----|
| ÷  | 6 | ÷  | 7  |
| 6  | 1 | 7  | 1  |
| 18 | 3 | 28 | 4  |
| 12 | 2 | 14 | 2  |
| 24 | 4 | 56 | 8  |
| 30 | 5 | 21 | 3  |
| 42 | 7 | 35 | 5  |
| 36 | 6 | 49 | 7  |
| 48 | 8 | 70 | 10 |

4

6

**f.** 11

| с.  |      |  |  |  |  |  |
|-----|------|--|--|--|--|--|
| ÷   | ÷ 11 |  |  |  |  |  |
| 44  | 4    |  |  |  |  |  |
| 11  | 1    |  |  |  |  |  |
| 66  | 6    |  |  |  |  |  |
| 77  | 7    |  |  |  |  |  |
| 110 | 10   |  |  |  |  |  |
| 99  | 9    |  |  |  |  |  |
| 22  | 2    |  |  |  |  |  |
| 88  | 8    |  |  |  |  |  |

| d. |    |    |
|----|----|----|
|    | ÷  | 12 |
|    | 24 | 2  |
|    | 48 | 4  |
|    | 12 | 1  |
|    | 60 | 5  |
|    | 84 | 7  |
|    | 36 | 3  |
|    | 72 | 6  |
|    | 96 | 8  |

#### **Division with remainders**

| Division with remainders |                          |             |       |          |      |          |       |  |  |
|--------------------------|--------------------------|-------------|-------|----------|------|----------|-------|--|--|
| Ex                       | Example a) 3 b) 5 c) 3r3 |             |       |          |      |          |       |  |  |
| 1.                       | a.                       | 54 ÷ 5      | = 10  | ) r 4    |      |          |       |  |  |
|                          | b.                       | 36 ÷ 4      | = 9 1 | r 0      |      |          |       |  |  |
|                          | c.                       | $60 \div 7$ | = 8 r | • 4      |      |          |       |  |  |
|                          | d.                       | 54 ÷ 9      | = 6 1 | r 0      |      |          |       |  |  |
|                          |                          |             |       |          |      |          |       |  |  |
| 2.                       | a.                       | 6 r 6       |       |          | b.   | 5 r 0    |       |  |  |
|                          | c.                       | 5 r 2       |       |          | d.   | 6 r 6    |       |  |  |
|                          |                          |             |       |          |      |          |       |  |  |
| 3.                       | a.                       | 3 r 1       |       |          | b.   | 5 r 1    |       |  |  |
|                          | c.                       | 3 r 1       |       |          | d.   | 3 r 3    |       |  |  |
|                          | e.                       | 3 r 2       |       |          | f.   | 8 r 1    |       |  |  |
|                          | g.                       | 4 r 2       |       |          | h.   | 7 r 7    |       |  |  |
|                          | i.                       | 7 r 3       |       |          | j.   | 3 r 2    |       |  |  |
|                          |                          |             |       |          | 0    |          |       |  |  |
| Di                       | visio                    | on Symbol   |       |          |      |          |       |  |  |
| 1.                       |                          | 6           | b.    | 5        |      | c.       | 5     |  |  |
|                          |                          | 7           |       | 4        |      | f.       | 4     |  |  |
|                          | g.                       | 9           |       | 2        |      | i.       | 3     |  |  |
|                          | j.                       | 9           |       | _        |      |          | -     |  |  |
|                          | J                        | -           |       |          |      |          |       |  |  |
| 2.                       | a.                       | 6           | b.    | 9        |      | c.       | 2     |  |  |
|                          | d.                       | 3           | e.    | 10       |      | f.       | 8     |  |  |
|                          | g.                       | 5           | h.    | 7        |      |          |       |  |  |
|                          | Θ.                       |             |       |          |      |          |       |  |  |
|                          | circ                     | ele ii)     |       |          |      |          |       |  |  |
| 3.                       |                          | 2 r 2       | b.    | 4        |      | c.       | 4 r 4 |  |  |
|                          |                          | 10 r 2      | e.    | 2 r      | 1    |          | 1 r 1 |  |  |
|                          |                          | 4           | h.    | 7        |      | i.       | 2 r 1 |  |  |
|                          | j.                       |             |       |          |      |          |       |  |  |
|                          | J                        |             |       |          |      |          |       |  |  |
| 4.                       | a.                       | 6, 3, 18, 2 | 2, 20 | , 5, 5   | 0, 1 | 0, 80, 1 | 0, 2  |  |  |
|                          |                          | 24, 8, 28,  |       |          |      |          |       |  |  |
|                          |                          |             |       | <i>,</i> |      | -        |       |  |  |

A:

1.

2.

6.

**B**:

1.

2.

6.

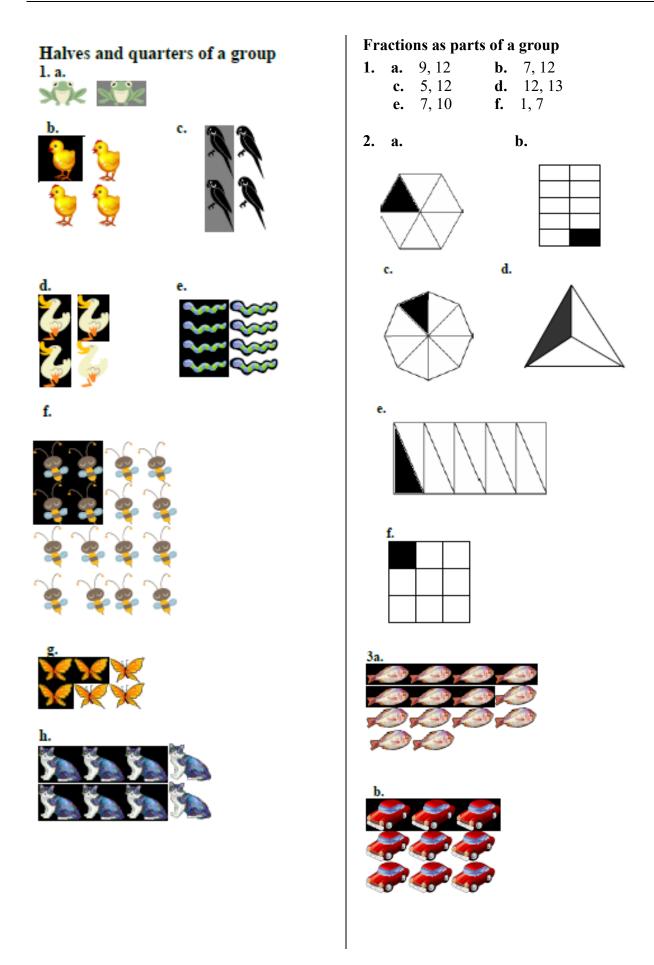
2.

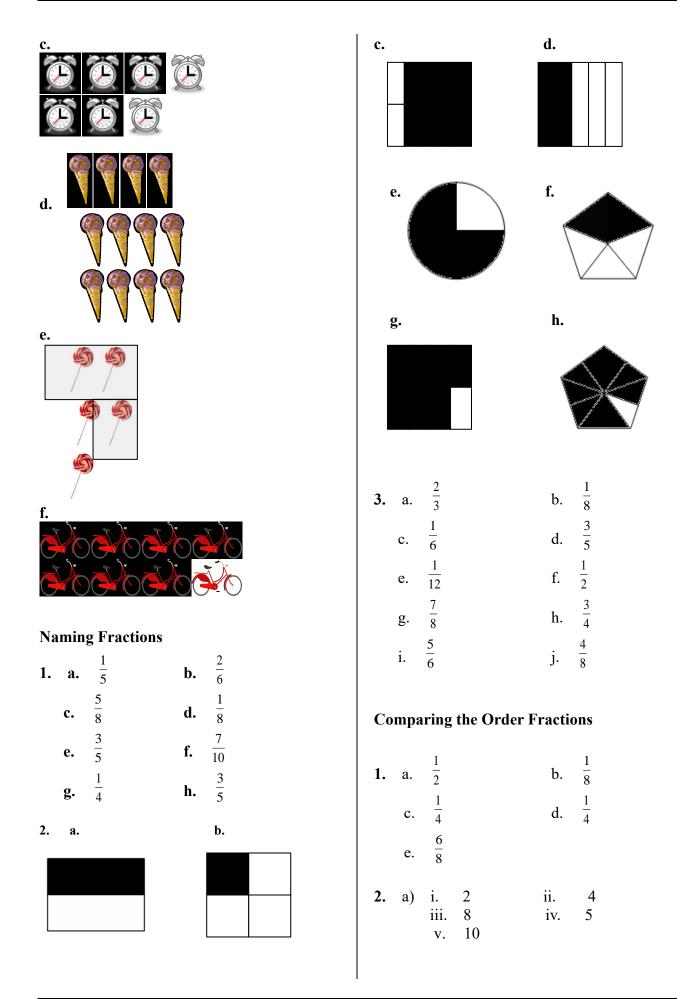
4.

5.

C: 1.

### **Quick Questions UNIT 6** 5 Halves and quarters of whole 6 **3.** yes 1. a. b. **4.** 18 **5.** 2930 10 7. 359 **8.** 54 d. c. **9.** 16 **10.** 25 2, 20, 200 7, 70, 700 e. **3.** 4, 40, 400 4. 3, 30, 300 5. 9, 90, 900 3, 30, 300 2. a. b. 2 5 **3.** \$3 4 8 d. c. e.





| b)<br>3. | iii.<br>v. '<br>vii<br>a. | Frue<br>False<br>True<br>True<br>True<br>$\frac{1}{8}$<br>$\frac{1}{5}$<br>$\frac{1}{4}$ |       |       | vi.<br>viii.<br>b.<br>d. | True<br>False<br>False<br>Tru<br>$\frac{1}{5}$<br>$\frac{1}{2}$<br>$\frac{1}{4}$ | :                        | 2.       |               |      |
|----------|---------------------------|--|-------|-------|--------------------------|--|--------------------------|----------|---------------|------|
| 4.       | c.                        | 4, 3, 1,<br>3, 2, 1,<br>4, 3, 2,   | , 4   |       |                          |  | 4, 1, 2, 3<br>4, 1, 2, 3 | 4.       |               |      |
| 5.       |                           | 1, 4, 3,<br>4, 1, 3,   |       |       |                          |  | 3, 1, 2, 4<br>3, 2, 4, 1 |          |               |      |
| Fra      | ctio                      | on of a c  | ollea | rtion |                          |  |                          |          |               |      |
|          |                           | 3  |       |       | 0                        | r  |                          |          |               |      |
| 1.       | a.                        | 5  | υ.    | 2     | U.                       | L  |                          |          |               |      |
| 2.       | a.                        | $\frac{1}{2}$  |       |       |                          |  |                          |          |               |      |
|          | d.                        | 4  | e.    | 4     | f.                       | 4  |                          |          |               |      |
|          |                           |  |       |       |                          |  |                          |          |               |      |
|          |                           |  |       |       |                          |  |                          |          |               |      |
| Qu       | ick (                     | Questio  | ns    |       |                          |  |                          | _        | 0             |      |
|          |                           |  |       |       |                          |  |                          | 5.       | 9             |      |
| A:       | 1                         | 25   |       |       |                          |  |                          | 6.<br>7. | 15            |      |
|          | 1.<br>2.                  | 35<br>54   |       |       |                          |  |                          | 7.<br>8. | 3 8           |      |
|          | 2.<br>3.                  | 120  |       |       |                          |  |                          | 9.       | 50            |      |
|          | <i>3</i> .<br>4.          | 1000   |       |       |                          |  |                          | 10.      | 6             |      |
|          | 5.                        | 1000   |       |       |                          |  |                          |          |               |      |
|          | 6.                        | 30   |       |       |                          |  |                          | C:       |               |      |
|          | 7.                        | 4  |       |       |                          |  |                          |          | 1. 9 2        |      |
|          | 8.                        | Februar  | ry    |       |                          |  |                          |          | <b>3.</b> 3 4 | . 27 |
|          | 9.                        | 6  |       |       |                          |  |                          |          |               |      |

B: 1.



#### **Number Patterns**

- 1. 13, 23, 33, 43, 53, 63, 73, 83, 93
- 2. 14, 24, 34, 44, 54, 64, 74, 84, 94

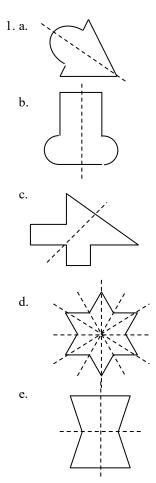
| 3. | a. 12, 14, 16, | 20 |
|----|----------------|----|
|    | b. 46, 52, 58, | 70 |
|    | c. 18, 21, 24, | 30 |
|    | d. 34, 38, 42, | 50 |

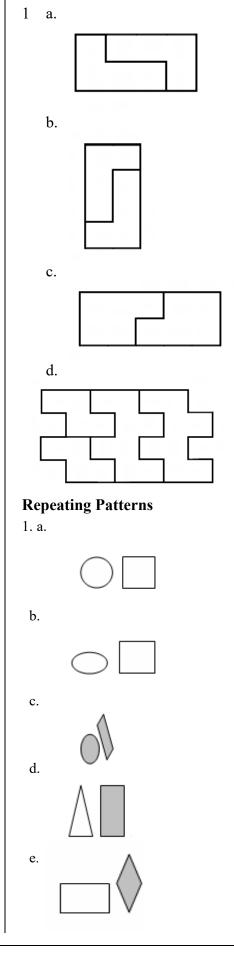
- 4. a. 19, 22, 25, 28, add 3
  b. 50, 55, 60, 65, add 5
  c. 24, 28, 32, 36, add 4
  d. 34, 38, 42, 46, add 4
  e. 256, 512, 1024, 2048, multiply by 2
- 5. a. 24, 21, 18, 12, 6, 3 b. 6, 10, 14, 26, 30, 34 c. 14, 16, 17, 19, 20

#### Patterns in Hundred Chart

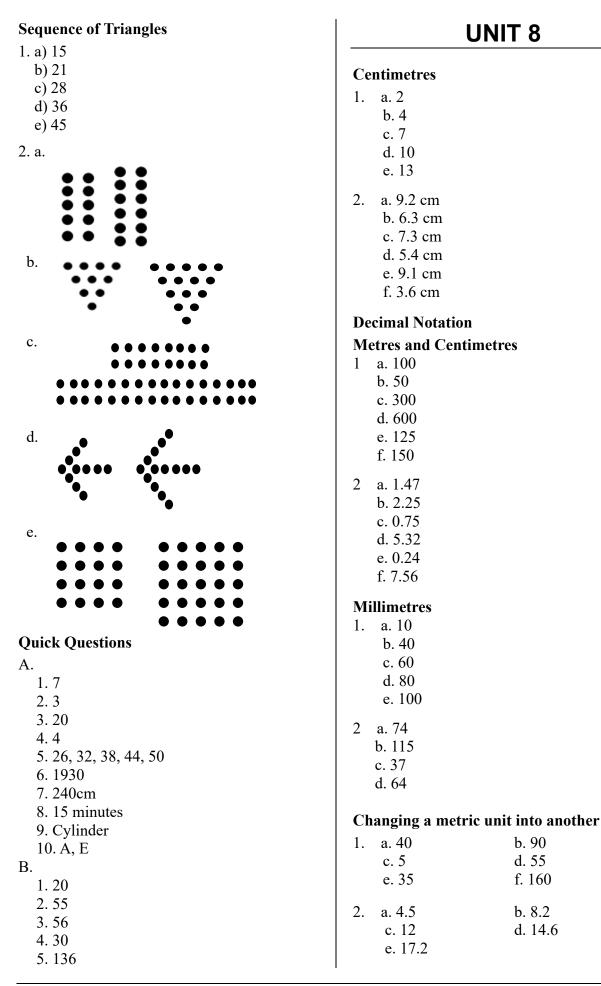
- 1. teacher mark
- 2. teacher mark

#### Symmetry





#### Tessellation



#### Perimeter

- 1. (may vary)
  - 12.6 cm a.
  - b. 21.2 cm
  - 14.8 cm c.
  - 21 cm d.
  - 158 mm e.
  - f. 242 mm

#### **Quick Questions**

- A.
- 1.111 2.50 3.400,401 4. one hundred and two 5.513 6.130 7.800 8.0.23 9. 1.2, 1.6, 1.7 10.  $\frac{8}{10} = \frac{4}{5}$

#### B.

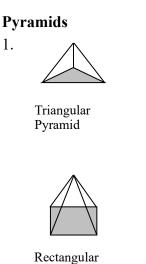
#### 1.14

2.14

- 3.16
- 4.26
- 5.20

# **UNIT 9**

- 1. a. Cube
  - b. Rectangular prism
  - c. Pentagonal prism
  - d. Triangular prism
  - e. Octagonal prism
  - f. Hexagonal prism
- 2 a. 1, 2
  - b. 1, 2
  - c. 1, 2
  - d. 1, 2
  - e. 1, 2
  - f. 1, 2





Square

Pyramid

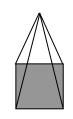
Pyramid

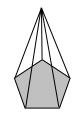


2.

Pyramid

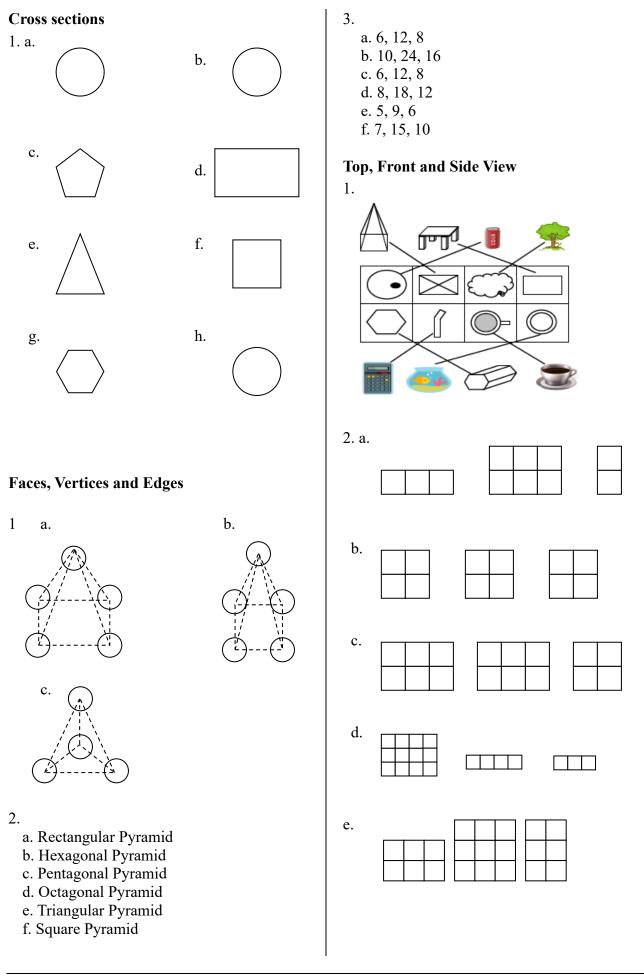






#### **Cones and Spheres**

- 1. a. cross
  - b. colour
  - c. circle
  - d. cross
  - e. colour
  - f. cross, circle
  - g. circle
  - h. cross
  - i. cross
  - j. colour

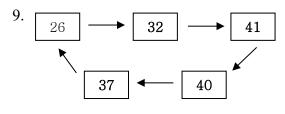


# Net of 3D Objects 1. Control of the second second

#### **Quick Questions**

#### A.

1. 835 2. 72 3. 35 4. 9 5.  $\frac{2}{10}, \frac{4}{10}, \frac{5}{10}, \frac{7}{10}$ 6. 0.25 7. \$1.95 8. 11:35



#### B.

- 1. triangle
- 2. rectangle
- 3. square
- 4. circle
- 5. hexagon
- 6. triangle
- 7. pentagon
- 8. octagon

# **UNIT 10**

#### **Constructing Column Graphs**

- a. Football, Netball, Cricket b. 2
- c. 15
- .
- a. Chips c. 8
- e. No
- b. Sandwiches
- d. Yes

2.

| Game      | Tally | Total |
|-----------|-------|-------|
| Handball  |       | 8     |
| Marbles   |       | 7     |
| hopscotch |       | 10    |
| skipping  |       | 4     |
| cards     |       | 5     |

| Skipping  |  |  |  |  |  |
|-----------|--|--|--|--|--|
| Hopscotch |  |  |  |  |  |
| Marbles   |  |  |  |  |  |
| Handball  |  |  |  |  |  |
| Cards     |  |  |  |  |  |

3.

a. i) 40 ii)100 iii) 50 iv) 10 b. 330 c. 70

4.

a. 10 cm b. 15 cm c. 30 cm

- 5. Teacher check
- 6. a) Game 6
  - b) Game 1
  - c) Second half

| Picture Graphs        | B.                           |
|-----------------------|------------------------------|
| 1. a) chips, 40       | $1, \frac{2}{-}=\frac{1}{-}$ |
| b) sandwiches, 8      | 10 5                         |
| c) 20                 | $2. \frac{2}{} = \frac{1}{}$ |
| d) 5                  | 10 5                         |
| 2. a. i) 15<br>ii) 21 | 3. $\frac{1}{10}$            |
| iii) 18               | 4                            |
| iv) 21                | 4. <u>10</u>                 |
| b. 123                | 5. $\frac{1}{1}$             |
| 3. a. 2003            | 10                           |
| b. harvest year       | 6                            |
| c. 600                | 10                           |
| d. 2300               |                              |

- e. 2002
- 4. Total (from the top): 29, 24, 36, 28, 24

#### Stamps for Good Behaviour and Bookwork

| Melvir   | \$\$ \$\$ \$ <b>\$</b> |
|----------|------------------------|
| Harjit   | \$\$ \$\$ <b>4</b>     |
| Mark     | \$\$ \$\$ \$\$ 9       |
| Jonathan | \$ \$ \$               |
| Alex     | × × 4                  |

#### **Quick Questions**

- A.
- 1.1
- 2.14
- 3. 32, 47
- 4. 436
- 5.64
- 6.5
- 7. 12:45
- 8. \$14.41
- 9. 1960
- 10. 48, 480, 4800, 48000

# Enrich Maths ANSWERS

# Term 1

# YEAR 3

#### **Problem Solving**

- 1. Three- thousand, six hundred and ninety seven
- 2. 80
- 3. 398 pages
- 4. 112, 312
- 5. 2
- 6. 1500
- 7. 9871
- 8. 176
- 9. 8172
- 10. 15

#### Extension

1. 21, 25, 29 2. 58, 65, 72 3. 25, 31, 37 4. 37, 31, 25 5. 88, 85, 82 19, 21, 28 6. 7. 7,8,10 8. 35, 31, 29 9. 43, 36, 32  $4,3\frac{1}{2},3$ 10.

#### **Missing Numbers**

- 1. 6, 12, +1
- 2. 9, 7, +3
- **3**. **6**, **16**, ÷2

#### **Original Numbers**

| 1. | a)<br>c) |                                    | b)<br>d) |                                     |
|----|----------|------------------------------------|----------|-------------------------------------|
| 2. | c)       | $rac{8^{	ext{th}}}{2^{	ext{nd}}}$ | b)<br>d) | 10 <sup>th</sup><br>3 <sup>rd</sup> |

#### 3. a) 14

- b) 14, 18, 22, 26, 30
- c) 26
- d) 5

## UNIT 2

#### **Problem Solving**

- 1. 70
- 580
   902
- 4. 796
- 5. 951
- 6. 919
- 7. 12
- 8. 308
- 9. 28
- 10. 586

#### Extension

#### 1 a.

|   | 5  | 3  | 6  | 4  |
|---|----|----|----|----|
| 2 | 7  | 5  | 8  | 6  |
| 7 | 12 | 10 | 13 | 11 |
| 1 | 6  | 4  | 7  | 5  |
| 8 | 13 | 11 | 14 | 12 |

| b. |    |    |    |    |    |
|----|----|----|----|----|----|
| υ. | +  | 4  | 1  | 7  | 8  |
|    | 7  | 11 | 8  | 14 | 15 |
|    | 12 | 16 | 13 | 19 | 20 |
|    | 8  | 12 | 9  | 15 | 16 |
|    | 1  | 5  | 2  | 8  | 9  |

| +  | 11 | 5  | 8                 | 1  |
|----|----|--|-------------------|--|
| 14 | 25 | 19   | 22                | 15   |
| 10 | 21 | 15   | 18                | 11   |
| 7  | 18 | 12   | 15                | 8  |
| 3  | 14 | 8  | 11                | 4  |
|    |    | 14         25           10         21           7         18 | 14251910211571812 | 14         25         19         22           10         21         15         18           7         18         12         15 |

d.

| +  | 2  | 9  | 1  | 8  |
|----|----|----|----|----|
| 7  | 9  | 16 | 8  | 15 |
| 5  | 7  | 14 | 6  | 13 |
| 11 | 13 | 20 | 12 | 19 |
| 3  | 5  | 12 | 4  | 11 |

e.

| + | 12 | 3  | 7  | 9  |
|---|----|----|----|----|
| 4 | 16 | 7  | 11 | 13 |
| 8 | 20 | 11 | 15 | 17 |
| 2 | 14 | 5  | 9  | 11 |
| 7 | 19 | 10 | 14 | 16 |
|   |    |    |    |    |

f.

| + | 12 | 14 | 7  | 3  |
|---|----|----|----|----|
| 8 | 20 | 22 | 15 | 11 |
| 1 | 13 | 15 | 8  | 4  |
| 5 | 17 | 19 | 12 | 8  |
| 7 | 19 | 21 | 14 | 10 |

b) 3

7 9

5 2

4

2 9

7

2 2

1

d) 4 2 - 3 8

f) 4 3

2 5 3

h) 7 2 - 4 4 **4 4** 2 8

2 7

4 **5** 

\_ 1 7

j) 7 [ - 2 4

l) 3 2

| <b>2. a.</b> 6 11 13 30  | UNIT 3  |  |
|--|---|--|
| 12       1       19       32         13       12       12       37         31       24       44       99         b.       12       19       3       34         13       14       4       31         10       7       16       33         35       40       23       98         c. $\overline{12}$ 17       8       32         16       3       14       33 | Problem Solving         1       a.       61 km         c.       60 km         e.       121 km         2.       366 pages         3.       90         4.       88 children         5.       295 stamps         6.       249         7.       188         8.       98         9.       19 cm         10.       \$25 | <ul> <li>b. 29 km</li> <li>d. 92 km</li> <li>f. 56 km</li> </ul> |
| $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$   | Extension<br>1<br>a) 7 8  | b)   |
| 3       a.       15       b.       45         c.       59       d.       70         e.       74       f.       41  | -24<br>54   | _ [  |
| Triangle Pattern<br>1:<br>a. 4, 2, 3<br>b. 1, 3, 5<br>c. 4, 5, 1   | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$  | d)<br>[  |
| <ul> <li>c. 4, 5, 1</li> <li>d. 1, 2, 9</li> <li>e. 6, 4, 5</li> <li>f. 9, 1, 5</li> <li>g. 7, 8, 3</li> <li>h. 9, 3, 5</li> </ul>   | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$   | f)<br>   |
| <b>n.</b> 7, 5, 5  | $\begin{array}{c ccccccccccccccccccccccccccccccccccc$   | h)<br>   |
|  | i) 3 8<br>- 1 9<br>1 9  | j) 7<br><u>- 2</u><br>4  |
|  | k) 9 7 6<br>- 5 9 5<br>3 8 1  | l) 3<br>- 2<br>1   |

|              | m) 7 4<br>- 5 9<br>1 5  | n) 4 1<br>- 2 3<br>1 8  | <b>Problem S</b><br><b>1.</b> 28   |
|--------------|---|---|--|
|              | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$                                      |   | <ol> <li>48</li> <li>32</li> <li>45</li> <li>84</li> <li>105</li> </ol>                                      |
| 2. a.        | $ \begin{array}{c cccc} - & 20 & 13 \\ \hline 6 & 14 & 7 \\ \hline 4 & 16 & 9 \end{array} $ |   | <ol> <li>7. 42</li> <li>8. 160</li> <li>9. 180</li> <li>10. 144</li> </ol>                                   |
| b.           | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$                                      |   | Extension<br>1.<br>A. 5,<br>B. 3,9<br>C. 20<br>D. 25   |
| c.           | $ \begin{array}{c ccccccccccccccccccccccccccccccccccc$                                      |   | <b>D.</b> 35,<br><b>E.</b> 18,<br><b>F.</b> 18,<br><b>2.</b> (Followin<br>6, 27, 24                          |
| <b>3.</b> a. | 92, 84, 76, 68, 60  | , 52  | 49, 8, 99  |
| 12           | 81 - 56 = 25<br>74 - 36 = 38<br>63 - 49 = 14  | $\begin{array}{rrrr} \underline{\text{Down}}\\ 1. & 55 - 45 = 10\\ 2. & 75 - 49 = 26\\ 3. & 65 - 37 = 28\\ 4. & 92 - 58 = 34\\ 6. & 83 - 38 = 45\\ 8. & 52 - 37 = 15\\ 10. & 73 - 29 = 44\\ 11. & 70 - 33 = 37 \end{array}$ | 3. a. 3, 2<br>b. 10,<br>c. 7, 8<br>d. 6, 7<br>e. 8, 4<br>f. 7, 3<br>g. 6, 4<br>h. 5, 3<br>i. 5, 4<br>j. 4, 3 |

#### Solving

- 10, 25, 30, 50 9, 12, 24 0, 32, 36, 40 5, 49, 70 8, 36, 63, 72, 90 8, 24, 36
- ing the trail) 24, 40, 36, 21, 32, 81, 20, 11, 84, 0, 9, 60, 100
- 2 ), 9 8 7 4 3 4 3 4 I, 3

#### **Problem Solving**

| 1. | 9     | 2.  | 63   |
|----|-------|-----|------|
| 3. | 3     | 4.  | 8,3  |
| 5. | 10, 3 | 6.  | \$12 |
| 7. | 6, 2  | 8.  | 11   |
| 9. | 7     | 10. | 4    |

#### Extension

1.

a.

| ÷ | 40 | 25 | 60 | 55 | 35 | 10 | 45 | 5 |
|---|----|----|----|----|----|----|----|---|
| 5 | 8  | 5  | 12 | 11 | 7  | 2  | 9  | 1 |

#### b.

| ÷ | 14 | 84 | 63 | 56 | 21 | 42 | 28 | 35 |
|---|----|----|----|----|----|----|----|----|
| 7 | 2  | 12 | 9  | 8  | 3  | 6  | 4  | 5  |

c.

| ÷ | 12 | 36 | 24 | 27 | 18 | 6 | 21 | 30 |
|---|----|----|----|----|----|---|----|----|
| 3 | 4  | 12 | 8  | 9  | 6  | 2 | 7  | 10 |

d.

| ÷ | 12 | 48 | 36 | 20 | 28 | 16 | 32 | 40 |
|---|----|----|----|----|----|----|----|----|
| 4 | 3  | 12 | 9  | 5  | 7  | 4  | 8  | 10 |

e.

| ÷ | 72 | 54 | 18 | 24 | 48 | 36 | 42 | 60 |
|---|----|----|----|----|----|----|----|----|
| 6 | 12 | 9  | 3  | 4  | 8  | 6  | 7  | 10 |

f.

| ÷ | 88 | 56 | 24 | 48 | 16 | 64 | 72 | 32 |
|---|----|----|----|----|----|----|----|----|
| 8 | 11 | 7  | 3  | 6  | 2  | 8  | 9  | 4  |

(rotating clockwise) **g.** 6, 13, 2, 7, 8, 10, 3, 9

- **h.** 2, 3, 9, 5, 6, 1, 4, 8
- **i.** 6, 8, 10, 4, 5, 3, 7, 2

| 2. | a) | <b>i.</b> 9 | ii. | 5  | iii. | 7 |
|----|----|-------------|-----|----|------|---|
|    | b) | <b>i.</b> 2 | ii. | 5  | iii. | 6 |
|    | c) | <b>i.</b> 8 | ii. | 10 | iii. | 9 |
|    | d) | <b>i.</b> 9 | ii. | 5  | iii. | 7 |

#### **3. a.** 4

- **b.** 6
- **c.** 3
- d. 2e. 8
- **f.** 7
- **g.** 5
- **h.** 9
- i. 5
- j. 7k. 5
- **I.** 10
- **m.** 4

#### **GREAT DIVIDING**

2.

3. 4.

5.

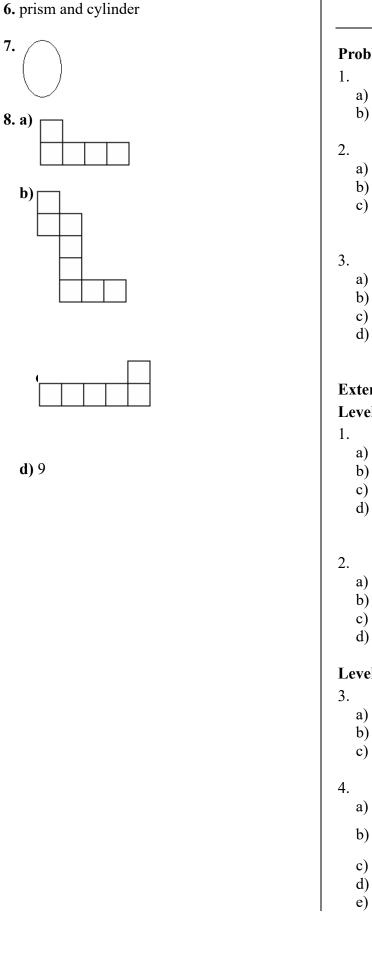
6.

7.

1.

#### **UNIT 6** UNIT 7 **Problem Solving Problem Solving** a. 6 b. 3 c. 4 15 1. 40 \$90 36 8 2 **8.** 60 2.3 (12, 24, 36) **9.** 107 3.44 10. 33 4.24 let the number of triangles = x, **Extension Level 2** *x*+*x*+6=42 2x = 36 $\frac{2}{5}$ $\frac{2}{3}$ 1. a. x =18 b. c. $\overline{3}$ Squares = 242 1 5.22 $\frac{3}{4}$ d. $\overline{2}$ f. $\overline{5}$ e. 6. a. 4 b. 0 3 1 1 $7.3 + 7 \times (7 - 3) = 31$ g. $\overline{5}$ h. $\overline{4}$ i. $\overline{2}$ 8. U 1 1 $\frac{2}{3}$ 9. l. j. k. $\overline{5}$ 3 2. a) a = jb) b = fc) c = 1d) d=he) e = If) f = b Level 3 Extension 1 1 1. b. a. $\overline{2}$ $\overline{2}$ 1 1 d. c. 4 **b)** 21 $\overline{2}$ **a)** 17 **c)** 31 1 3 f. **2.** a) 4 **b)** 8 **c)** 12 e. $\overline{2}$ 8 e) 16, 20, 24, 28, 32 **d**) Add 4 1 3 h. $\overline{2}$ 8 g. Level 3 5 1 i. j. $\overline{2}$ 8 3. a) b) **4. a)** 20 **b)** 28

#### **UNIT 8 UNIT 9 Problem Solving Problem Solving** 1. $850 \text{ cm}^2$ 1. 48 cm 2. 6 2. 925 m 3. 123 m $\frac{100}{20} + 1 = 51$ 4. 12 5. 44 4. 24 m 6. 24 5. 1600 cm = 16 m7. 130 6. 10 8. 26 7. $\frac{180}{2} - 70 = 20 \,\mathrm{cm}$ good tiles = 14• total tiles = $8 \times 5 = 40$ • 8. $\frac{60}{12} = 5 \text{ m}$ • tiles to be replaced = 40 - 14 = 269. 9(27 - 18 = 9)10.6 Extension Extension Level 2 **1.** a) 1. a) 8 cm **b)** 7 cm c) 9 cm **2.** 104 m b) **3.** 4 cm 4.6 cm 5 a) ⊢ -100m **2. a) i)** 12 ii) 18 iii) 8 **b**) ⊢ Х **b)** i) 0 ii) 0 iii) 0 -1000m 3. Marker check Level 3 4. a) 6. a) 28 cm **b)** 34 cm **c)** 136cm 7. a) 288 m **b)** The Hall b) **c)** 640 m **d)** 1352 m e) 272 m Level 3 5. **Triangular Pyramid**



# **UNIT 10**

#### **Problem Solving**

- - a) Cruises b) 22

a) Cheese b) 100 c)  $(20 \times 5 + 20 \times 1) + (20 \times 5 + 20 \times 0.5)$ = \$230

a) 24 b) Computing c) 116 d) 6

#### Extension

#### Level 2

- a) 76 b) blue c) 40 - 10 = 30d) 130
- a) 29°c b) Saturday, 34°c c) 3°c d) Monday and Thursday

#### Level 3

a) Lavender b) 7 c) 42

```
c) orange
```

```
d) 5
```

```
e) teacher mark
```

# Creative Problem Solving

# ANSWERS

# Term 1

# YEAR 3

#### **Shapes and Fractions**

| <b>Fraction Shaded</b> | Shape     |
|------------------------|-----------|
| 1 out of 2             | Triangle  |
| 2 out of 6             | Rectangle |
| 4 out of 4             | Hexagon   |
| 5 out of 8             | Square    |
| 3 out of 8             | Circle    |

#### Measurement

- **1.** 14
- **2.** 15
- **3.** 22
- **4.** 16
- **5.** 20

#### **General Problems**

- **1.** 48
- **2.** \$270
- **3.** 5
- **4.** 312 weeks
- 5. 120 km
- 6. 2:20pm
- **7.** 24
- **8.** \$6.90

# UNIT 2

#### Money

- **1.** \$17
- **2.** \$1 and 50c
- 3. \$7

#### Writing numbers in words

- 1. -
- 2. Eight hundred and ninety three
- 3. Three hundred and seventy four
- 4. Nine hundred and sixty two
- 5. One thousand four hundred and sixty seven
- **6.** 679
- 7. 444

#### **General Problems**

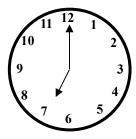
- **1.** 14 kg
- **2.** 300 m
- **3.** \$1346
- **4.** 117
- **5.** a) 290 b)\$420
- **6**. 6

# UNIT 3

#### Timetables



#### 7:00pm



#### **General Problems**

- 1. 50
- **2.** 4
- **3.** 73
- **4.** 910
- 5. The 4<sup>th</sup> of December
- **6.** \$18
- 7. \$120
- **8.** \$26

#### The Cake and Pie Shop

- **1.** \$25.10
- **2.** \$7.60
- **3.** \$22.4

#### Find the Number

- **1.** 57
- **2.** 68
- **3.** 80 or 84 or 88

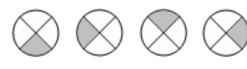
#### **General Problems**

- 1. 4350 m
- **2.** 18
- **3.** 110
- **4.** 376
- 5. 23 + 21 + 19 + 17 + 15 = 95
- **6.** 168
- **7.** 23

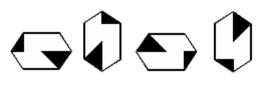
## UNIT 5

#### **Rotations – Mixed Up**

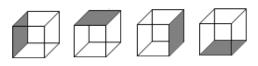
**1.** 1, 4, 3, 2



**2.** 1, 4, 2, 3



**3.** 1, 4, 2, 3



**4.** 1, 4, 2, 3



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#### **Pie Charts**

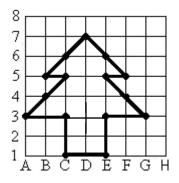
- 1. False
- 2. True
- 3. True
- 4. False
- 5. True

#### **General Problems**

- **1.** 1060 g
- **2.** 9:40 pm
- **3.** 806
- **4.** 10 022
- **5.** \$40
- **6.** 30
- **7.** <sup>1</sup>⁄<sub>4</sub>

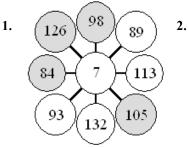
## **UNIT 6**

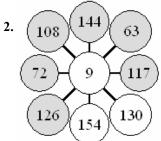
#### **Co-ordinates**

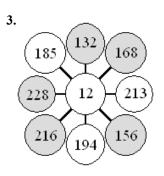


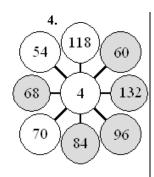
#### Tree

#### Measurement









#### **General Problems**

- 1. 39
- **2.** \$535
- **3.** 78
- **4.** \$182
- **5.** \$22.4
- **6.** 16
- 7. 1100 g

## UNIT 7

#### Area

- 1.  $87 \text{ cm}^2$
- **2.**  $496 \text{ cm}^2$
- **3.**  $128 \text{ cm}^2$

#### A Balancing Act

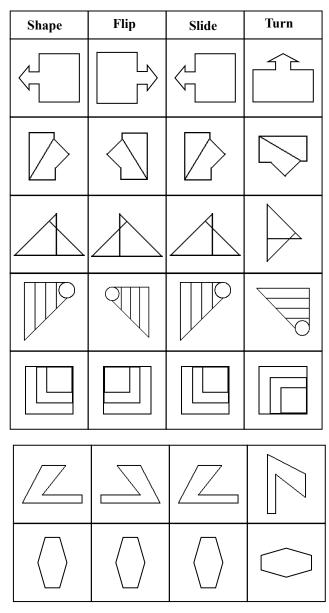
- **1.** 24
- **2.** 8
- **3.** 1000

#### **General Problems**

- **1.** 73/100
- **2.** 75
- **3.** 24
- **4.** \$5
- **5.** a) \$1722 b) \$1646
- **6.** \$360
- **7.** 5

# UNIT 8

#### Flip it, slide it, turn it



Marker: Check the rest of the tables

#### Grids

| X |           | Blue |  |     |   |
|---|-----------|------|--|-----|---|
|   | $\square$ |      |  |     |   |
|   |           | Н    |  |     |   |
|   |           |      |  | Red | L |

- 7.  $7^{\text{th}}$  square,  $3^{\text{rd}}$  row
- 8.  $3^{rd}$  square,  $2^{nd}$  row

#### **General Problems**

- 1. 8 bags, 3 kg left over
- **2.** 35
- **3.** \$14.80
- **4.** 22 minutes
- **5.** 7
- **6.** \$12
- **7.** 7.5 kg
- 8.  $\frac{4}{10} = \frac{2}{5}$

## UNIT 9

#### **Relay Race**

- 1. Team C, 2 minute and 35 seconds
- 2. Team B, 2 minute and 43 seconds
- **3.** 8 seconds
- 4. Team B
- 5. Team B, 11 seconds

#### **General Problems**

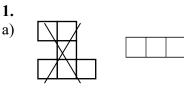
- 1. 35L
- **2.** a) 3:12 pm
  - b) 11:18 pm
  - c) 5:24 pm
- **3.** 19<sup>th</sup>
- 4. Mark \$15 Brenda - \$10
- **5.** 81
- **6.** 6
- **7.** 4:17
- **8.** 30

# **UNIT 10**

#### **Shape Patterns**

- 1. -
- **2.** 3, 6, 9, 12 adding 3
- **3.** 6, 12, 18, 24 adding 6
- **4.** 5, 10, 15, 20 adding 5

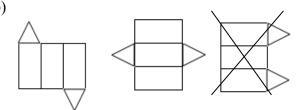
#### Nets of 3D Shapes



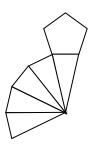


b)

4.



3. Marker: check



#### **General Problems**

- 1. 1050 grapes
- **2.** 24
- **3.** 32
- **4.** \$4.25
- 5. 50 L, (40 L and 10 L)
- **6.** \$216
- 7. 7 each and 2 left over
- **8.** 72

# Mental Maths ANSWERS

Term 1

# YEAR 3

#### Day 1

| Day   | L   |                 |      |         |
|-------|-----|-----------------|------|---------|
| 1.    | a.  | 513             | b.   | 256     |
| 2.    | 525 | 5, 257          |      |         |
| 3.    | nin | e hundred and   | twer | nty-one |
| 4.    | 80  |                 |      |         |
|       |     | 206             | b.   | 227     |
|       | 410 | )               |      |         |
|       |     | 2400            | b.   | 8621    |
|       | 230 | 5, 220, 211, 20 | 6    |         |
| 9     | a.  | 200             | b.   | 600     |
| 10.   | 29  | 0               |      |         |
|       |     |                 |      |         |
| Day 2 |     |                 |      |         |
| 1.    |     | 60, 70, 80      |      |         |
|       | b.  | 108, 118, 128   |      |         |
| 2.    |     | 84, 94, 114     |      |         |
|       | b.  | , ,             |      |         |
| 3.    |     | 2, 2732, 2742,  |      |         |
|       |     | 1, 6361, 6351   |      | -1      |
| 5.    |     | 632, 532, 332   |      |         |
|       |     | 625, 425, 325   |      |         |
| 6.    |     | 159             |      | 357     |
| 7.    |     | 6510            |      | 9863    |
| 8.    |     | False           |      | True    |
| 9.    | a.  |                 | b.   | <       |
| 10.   | 98  | 76              |      |         |
| _     |     |                 |      |         |
| Day 3 |     |                 |      |         |
| 1     | a.  | 23, 25, 27      |      |         |

#### D

| 1  | a.  | 23, 25, 27       |    |    |
|----|-----|------------------|----|----|
|    | b.  | 34, 36, 38       |    |    |
| 2. | 41, | , 36, 31, 26, 21 |    |    |
| 3  | a.  | 77               | b. | 65 |
| 4. | a.  | 98               | b. | 73 |
| 5. |     |                  |    |    |

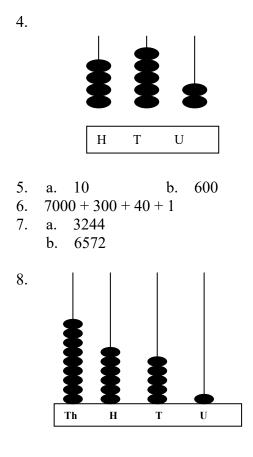
## 44.2

| 6. | Add 3             |
|----|-------------------|
| 7  | a. 23, 29, 35, 41 |
|    | b. 10, 8, 6, 4    |
| 8. | 59, 84, 114       |
| 9. | 53, 47, 42        |

#### 10. 108, 123, 141

#### Day 4

| 1. | 800 + 30 + 5 |    |     |
|----|--------------|----|-----|
| 2. | a. 321       | b. | 486 |
| 3. | 700 + 60 + 3 |    |     |



- a. 6000 9.
  - 40 b.
- 10. The possibilities are 458, 485, 548, 584, 845, 854 therefore there are 6 possibilities.

| 1.  | a.  | 100      |
|-----|-----|----------|
|     | b.  | 120      |
| 2.  | a.  | 240      |
|     | b.  | 380      |
| 3.  | a.  | 240      |
|     | b.  | 360      |
| 4.  | a.  | 900      |
|     | b.  | 400      |
| 5.  | a.  | 250, 240 |
|     | b.  | 200, 171 |
| 6.  | a.  | 7320     |
|     | b.  | 7000     |
| 7.  | a.  | 10000    |
|     | b.  | 10000    |
| 8.  | 120 | 0        |
| 9.  | 500 |          |
| 10. | 90  | 00       |
|     |     |          |

Day 2

1. 45 2. 61 3. 110

74 7. 8. 101

139

72

108

134 16. 176

352

593

399

990

691

720

232

4. 54 5. 91 90 6.

9. 50 10. 100 11. 83 12.

13.

14.

15.

1. 2.

3.

4.

5.

6.

7.

8. 247

9. 280 10. 894 11. 681 12. 770 13. 350 14. 723 15. 364 16. 563

9. 827 10. 485 11. 1105 12. 1314 13. 1998 14. 219 206

15.

| Day 6  |  |
|--|--|
| 1. a. 8569<br>b. 9407  | Day 1  |
| 2.<br>Th H T U<br>3.   | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   |
| 4. a) 7000   | Day 3  |
| <ul> <li>b)300</li> <li>5. 1978, 1988, 1998, 2008, 2018</li> <li>6. 45, 60, 78</li> <li>7. a) 5500         <ul> <li>b) 5000</li> </ul> </li> <li>8. 8430, 3048</li> <li>9. 1000         <ul> <li>10. 3960</li> </ul> </li> </ul> | 1.       444         2.       369         3.       499         4.       849         5.       697         6.       928         7.       479         8.       929         9.       929         10.       366         11.       559         12.       767         13.       968         14.       897         15.       888         16.       776         Day 5       5 |
|  | 1. 716<br>2. 1110<br>3. 921<br>4. 1154<br>5. 421<br>6. 602<br>7. 1102<br>8. 921<br><b>Day 6</b><br>1. 1189<br>2. 1580<br>3. 1402<br>4. 829<br>5. 1078<br>6. 1215<br>7. 1100<br>8. 1212<br>9. 287<br>10. 919<br>11. 204<br>12. 888  |

| YEAR 3 |  |
|--------|--|
|--------|--|

|       | UN   | IT 3  |       |   |   |  | UN                  | IT                  | 4   |   |                                 |                     |                     |
|-------|--|---|-------|---|---|--|---------------------|---------------------|---|---|---------------------------------|---------------------|---------------------|
| Day 1 | $\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$   | Day 2<br>1. 7<br>2. 9<br>3. 17<br>4. 9<br>5. 27<br>6. 57<br>7. 7<br>8. 28<br>9. 13<br>10. 9<br>11. 28<br>12. 59<br>13. 38<br>14. 25<br>15. 19<br>16. 49 | Day 1 | 1.<br>2.<br>3.<br>4.<br>5.<br>6.<br>7.<br>8.<br>9.<br>10.<br>11.<br>12.<br>13.                                | 24<br>18<br>22<br>9<br>33<br>12<br>24<br>10<br>14<br>1<br>1<br>1<br>2 | 5<br>8<br>6                                  | Da                  | y 2                 | 1.<br>2.<br>3.<br>4.<br>5.<br>6.<br>7.<br>8.<br>9.<br>10.<br>11.<br>12.<br>13.                                    | 26<br>42<br>60<br>36<br>80<br>40<br>115<br>132<br>225<br>11<br>25<br>76<br>31 | 2<br>5                          |                     |                     |
| Day 3 | $\begin{array}{cccccccccccccccccccccccccccccccccccc$   | Day 4<br>1. 125<br>2. 247<br>3. 609<br>4. 35<br>5. 427<br>6. 519<br>7. 18<br>8. 4, 2, 7<br>9. 607<br>10. 4, 3, 6  | Day 3 | <ol> <li>14.</li> <li>15.</li> <li>16.</li> <li>1.</li> <li>2.</li> <li>3.</li> <li>4.</li> <li>5.</li> </ol> | 2<br>3<br>7<br>18<br>29<br>22<br>15<br>18                             | 7<br>6<br>7<br>6<br>4<br>2<br>3<br>4         |                     |                     | <ul> <li>14.</li> <li>15.</li> <li>16.</li> <li>9.</li> <li>10.</li> <li>11.</li> <li>12.</li> <li>13.</li> </ul> | 48<br>18<br>23<br>48<br>82<br>53<br>48<br>44                                  | 5<br>4<br>6<br>8<br>9<br>8<br>1 |                     |                     |
| Day 5 | 1.       386         2.       77         3.       140         4.       181         5.       375         6.       59         7.       3, 9, 9         8.       \$185         9.       2, 9, 7         10.       1, 8, 7 | Day 6<br>1. 527<br>2. 228<br>3. 85<br>4. 192<br>5. 340<br>6. 186<br>7. 5, 6, 4<br>8. 3, 4, 4<br>9. 604<br>10. 284                                       | Day 4 | 8.  | 0<br>0<br>0<br>9<br>a. 7<br>36<br>84                                  | 6<br>3<br>4<br>156<br>1<br>7<br>8<br>9<br>76 | 2<br>14<br>16<br>18 | 3<br>21<br>24<br>27 | 14.<br>15.<br>16.<br>4<br>28<br>32<br>36<br>175   | 5<br>35<br>40<br>45   | 4<br>2                          | 8<br>56<br>64<br>72 | 9<br>63<br>72<br>81 |

| Day 5<br>1. 112<br>2. 108<br>3 a. 152<br>4 a. 104<br>5. 152<br>6. 40<br>7. 336<br>8 a. 78<br>9. 216<br>10. 324      | b. 306<br>b. 161<br>b. 156  | c. 378<br>c. 216<br>c. 738  | Day 3<br>1. 11 r 1<br>2. 41<br>3. 24<br>4. 16<br>5. 17<br>6. 11 r 5<br>7. 20 r 3<br>8. 22      | 9. 14<br>10. 29<br>11. 18 r 3<br>12. 18 r 3<br>13. 11<br>14. 15 r 1<br>15. 4<br>16. 12 r 1                             |
|---|-----------------------------|-----------------------------|--|--|
| Day 6<br>1. 168<br>2. 361<br>3. a. 115<br>4. a. 273<br>5. 180<br>6. 72<br>7. 84<br>8. a. 640<br>9. 448<br>10. 50400 | b. 423<br>b. 333<br>b. 1600 | c. 476<br>c. 384<br>c. 5120 | Day 4<br>1. 11<br>2. 3<br>3. 3<br>4. 19<br>5. 21<br>6. 19<br>7. 16<br>8. 21<br>9. 17<br>10. 17 | Day 5<br>1. 0<br>2. 16 r 1<br>3. 16, 1 spare<br>4. 5 r 4<br>5. 3<br>6. 9<br>7. \$49<br>8. 6 r 3<br>9. 15<br>10. 27 r 2 |

| Day 1  | Day 2  |
|--------|--------|
| 1. 14  | 1. 15  |
| 2. 12  | 2. 10  |
| 3. 11  | 3. 7   |
| 4. 9   | 4. 8   |
| 5. 12  | 5. 12  |
| 6. 15  | 6. 27  |
| 7. 24  | 7.9    |
| 8. 41  | 8. 19  |
| 9. 38  | 9. 19  |
| 10. 31 | 10. 12 |
| 11. 18 | 11. 12 |
| 12. 15 | 12. 15 |
| 13. 21 | 13. 9  |
| 14. 23 | 14. 11 |
| 15. 44 | 15. 13 |
| 16. 24 | 16. 16 |

#### Day 6

| 1. | 18 |  |
|----|----|--|
| 2  | ~  |  |

- 2. 5 3. 1
- 4. 19, 4 spare
- 5. 13 Days
- 6. \$32.00
- 7. 14
- 8. 5
- 9. 15
- 10.12

# **UNIT 6**

# Day 1

1. 9 (add 2)

2. 13(add 1)

- 3. 6(add 2)
- 4. 0(add 5)
- 5. 3(add 3)

6. 105(add 3)

- 7. 38(add 2)
- 8. 90(add 5)
- 9. 42(add 1)
- 10. 63(add 4)

#### Day 2

- 1. 70(Subtract 10)
- 2. 28(Subtract 7)
- 3. 133(Subtract 4)
- 4. 47(Subtract 3)
- 5. 84(Subtract 1)
- 6. 6(Subtract 5)
- 7. 23(Subtract 2)
- 8. 51(Subtract 6)
- 9. 55(Subtract 9)
- 10. 202(Subtract 3)

#### Day 3

- 1. 2 (Multiplied by 3)
- 2. 6 (Halved)
- 3. 10 (Doubled)
- 4. 24 (Halved)
- 5. 32 (Doubled)
- 6. 2 (Divided by 5)
- 7. 9 (Multiplied by 3)
- 8. 8 (Doubled)
- 9. 1 (Divided by 3)
- 10. 160 (Halved)

#### Day 4

- 1. 10 (Add 1 more each time)
- 2. 41 (Add multiplies of 3)
- 3. 49 (Add double of difference before)
- 4. 48 (Add multiplies of 5)
- 5. 121 (Add multiplies of 2)
- 6. 1 (Add double of difference before)
- 7. 9 (Square numbers)
- 8. 221 (Add double of difference before)
- 9. 8 (Cubed numbers)
- 10. 30 (Add ascending add numbers)

#### Day 5

- 1. 94 (Subtract increasing multiples of 2)
- 2. 63(Subtract decreasing multiplies of 3)
- 3. 16 (Square numbers)
- 4. 49(Odd cube numbers)
- 5. 1(Even cube numbers)
- 6. 142(Subtract difference increase by 1)
- 7. 114 (Subtract difference increase by 1)
- 8. 25(Subtract decreasing odd numbers)
- 9. 32(Subtract half of difference before)
- 10. 57(Subtract multiplies of 5)

#### Day 6

- 1. 24(Add 3)
- 2. 25(Add 4)

- 3. 10(Subtract 6)
- 4. 113(Subtract 3)
- 5. 4(Halve)
- 6. 81(Multiply number before by 3)
- 7. 2(Add multiplies of 5)
- 8. 26(Add odd numbers)
- 9. 27(Subtract even numbers)
- 10. 49(Subtract multiplies of 5)

# UNIT 7

#### Day 1

- 1. Metres
- 2. Centimetres
- 3. Metres
- 4. Millimetres
- 5. Metres
- 6. Metres
- 7. Metres or centimetres
- 8. Millimetres
- 9. Kilometres
- 10. Kilometres

#### Day 2

- 1. 200 cm
- 2. 1200 cm
- 3. 7000 cm
- 4. 50 cm
- 5. 550 cm
- 6. 1930 cm
- 7. 406 cm
- 8. 1680 cm
- 9. 6100 cm
- 10. 300 cm

- 1. 1 m
- 2. 13 m
- 3. 6.5 m
- 4. 490 m
- 5. 0.5 m
- 6. 2 m 7. 13 m
- 7. 15 m 8. 49 m
- 0. 47 m 1
- 9.  $28\frac{1}{2}$  m
- 10. 29 m

#### Day 4

- 1. 70 mm
- 2. 290 mm
- 3. 45 mm
- 4. 1600 mm
- 5. 5 mm
- 6. 60 mm
- 7. 165 mm
- 8. 228 mm
- 9. 573 mm
- 10. 210 mm

#### Day 5

- 1. 4 cm
- 2. 35 cm
- 3. 806 cm
- 4. 0.5 cm
- 5. 2.5 cm
- 6. 19 cm
- 7. 34 cm
- 8. 1017 cm
- 9. 67.5 cm
- 10. 560.5 cm

#### Day 6

- 1. Metres
- 2. Centimetres
- 3. 1150 cm
- 4. 1000 cm
- 5. 1.5 m
- 6. 34.5 m
- 7. 75 mm
- 8. 770 mm
- 9. 5.5 cm
- 10. 25 cm

# **UNIT 8**

#### Day 1

- 1. Square Pyramid
- 2. Sphere
- 3. Triangular Prism
- 4. Cube
- 5. Triangular Pyramid
- 6. Cylinder
- 7. Pentagonal Prism
- 8. Cone
- 9. Hexagonal Pyramid
- 10. Rectangular Prism

#### Day 2

- 1. Cone
- 2. Triangular Pyramid
- 3. Sphere
- 4. Pentagonal Pyramid
- 5. Square Pyramid
- 6. Cube
- 7. Hexagonal Prism
- 8. Pentagonal Prism
- 9. Triangular Prism
- 10. Cylinder

#### Day 3

- 1. Cone
- 2. Cube
- 3. Triangular Pyramid
- 4. Triangular Prism
- 5. Square Pyramid
- 6. Pentagonal Pyramid
- 7. Cylinder
- 8. Rectangular Prism or square prism

#### Day 4

- 1. Sphere
- 2. Cone
- 3. Cylinder
- 4. Rectangular Prism
- 5. Cube
- 6. Square Pyramid
- 7. Cone
- 8. Cylinder
- 9. Sphere
- 10. Rectangular Prism

#### Day 5

- 1. 2 Spheres + 1 Cone
- 2. 2 Rectangular Prisms
- 3. 2 Cylinders
- 4. 1 Cylinder + 1 Rectangular Prism
- 5. 1 Rectangular Prism + 1 Triangular Prism
- 6. 1 Cone + 1 Hexagonal Prism

- 1. Hexagonal Prism
- 2. Pentagonal Pyramid
- 3. Hexagonal Pyramid
- 4. Cone
- 5. Hexagonal Pyramid
- 6. Cube
- 7. Cone
- 8. Rectangular Prism
- 9. 1 Cylinder + 1 Rectangular Prism
- 10. 1 Cone + 1 Rectangular Prism

| UNIT 9   | UNIT 10   |
|--|---|
| <ul> <li>Day 1</li> <li>1. 43 cm</li> <li>2. July</li> <li>3. 112 cm</li> <li>4. Teacher Mark</li> <li>Day 2</li> <li>1. 8</li> <li>2. 13</li> <li>3. 2</li> <li>4. Teacher Mark</li> <li>5. 7</li> <li>Day 3</li> <li>1. 7</li> <li>2. 5</li> <li>3. Teachers mark</li> </ul> | Day 1<br>1. Seconds<br>2. Hours<br>3. Minutes<br>4. Days/weeks<br>5. Years<br>6. Months<br>7. Minutes<br>8. Years<br>9. Minutes/Hours<br>10. Seconds<br>Day 2<br>1. 5 minutes<br>2. 2 minutes<br>$\frac{1}{2}$ Normalized and a second secon |
| <ul> <li>J. Teachers mark</li> <li>4. 22</li> <li>Day 4</li> <li>1. 13</li> <li>2. 19</li> <li>3. 11</li> <li>4. Teachers mark</li> <li>5. 1</li> </ul>  | 3. <sup>2</sup> Minutes<br>4. 3.5 minutes OR $3\frac{1}{2}$ minutes<br>5. 100 minutes<br>6. 9 minutes<br>7. 19 minutes<br>8. 10 minutes<br>9. 70.5 minutes OR $70\frac{1}{2}$ minutes   |
| Day 5<br>1. 130 mm<br>2. It rained 90 mm less<br>3. 60 mm per week<br>4. Teachers mark<br>5. 65 mm per week<br>Day 6<br>1. 26<br>2. 6<br>3. $\frac{6}{26} = \frac{3}{13}$<br>4. 6<br>5. 2 (14 - 12)<br>6. Teachers mark<br>7. $\frac{10}{32} = \frac{5}{16}$                   | 10. 6.5 minutes OR $6\frac{1}{2}$ minutes<br><b>Day 3</b><br>1. 120 seconds<br>2. 270 seconds<br>3. 600 seconds<br>4. 30 seconds<br>5. 3000 seconds<br>6. 190 seconds<br>7. 530 seconds<br>8. 330 seconds<br>9. 480 seconds<br>10. 602 seconds  |

#### Day 4

- 1.  $\frac{1}{2}$  Hour
- $2. \quad 7 \text{ hours}$
- 3. 4.5 hours OR  $4\frac{1}{2}$  hours
- 4. 5 hours
- 5. 1.5 hours OR  $1\frac{1}{2}$  hours
- 6. 17 hours
- 7. 4.5 hours OR  $4\frac{1}{2}$  hours 8. 9.5 hours OR  $9\frac{1}{2}$  hours
- 9. 4 hours 10. 22.5 hours OR  $22\frac{1}{2}$  hours

#### Day 5

- 1. 120 minutes
- 2. 330 minutes
- 3. 600 minutes
- 4. 30 minutes
- 5. 660 minutes
- 6. 434 minutes
- 7. 69 minutes
- 8. 378 minutes
- 672 minutes
   62 minutes

- 1. Hours
- 2. Minutes
- 3. 4 minutes

4. 6.5 minutes OR 
$$6\frac{1}{2}$$
 minutes

- 5. 900 seconds
- 6. 291 seconds

7. 2.5 hours OR 
$$2\frac{1}{2}$$
 hours

8. 4.5 hours OR 
$$4\frac{1}{2}$$
 hours

- 9. 450 minutes
- 10. 260 minutes