

Volume 1

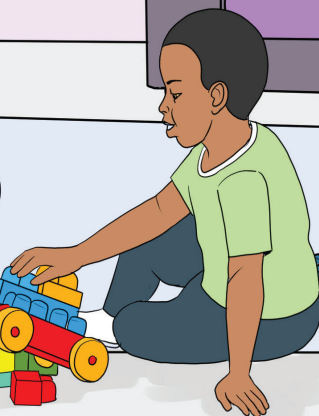
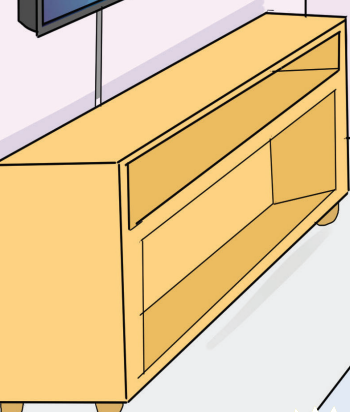
PLUS ONE

Study Pack

Mathematics and Science

Physical Education and Arts

Grade 1



New Curriculum
With
Answers

Volume 1

PLUS ONE

Study Pack

Mathematics and Science

Physical Education and Arts

Grade 1



SECONDARY
BOOK PRESS

Anchors of the schools curricula

Published by:

Secondary Book Press Private Limited

4th Floor, CABS Centre Building,

Cnr Jason Moyo & 2nd Street,

Harare, Zimbabwe

Tel: +263 242 771 406 | +263 242 753 201

Mobile: +263 712 560 870 | +263 788 954 870

Email: sales@secondarybookpress.co.zw

Website: www.secondarybookpress.co.zw

PlusOne Grade 1 Study Pack | Volume 1**ISBN: 978 – 0 – 7974 – 8554 – 9**

First Published in August 2023

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Editor-in-Chief: Munyaradzi Gunduza

Text and design layout: Nesbert T. Gotekote

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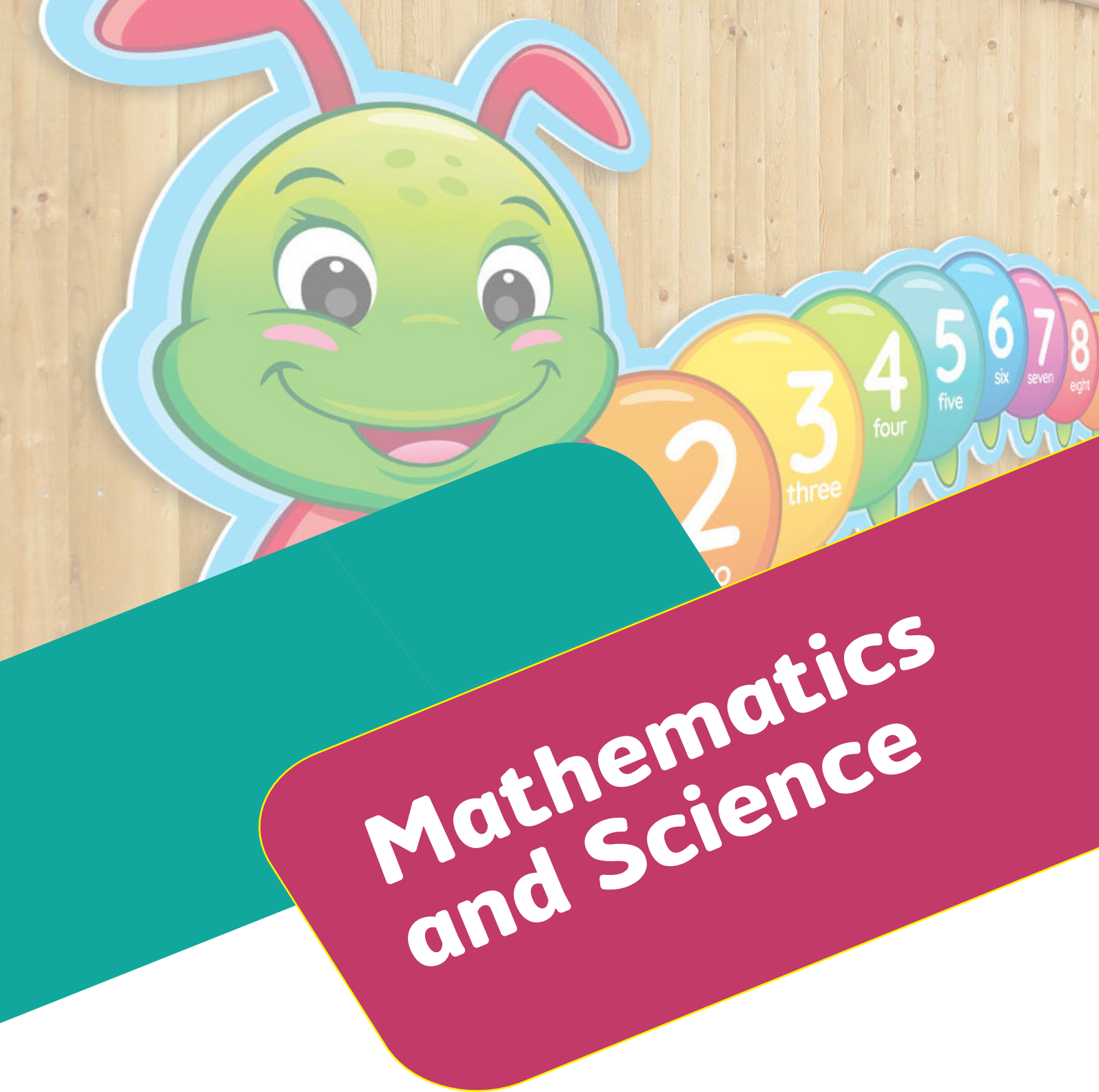
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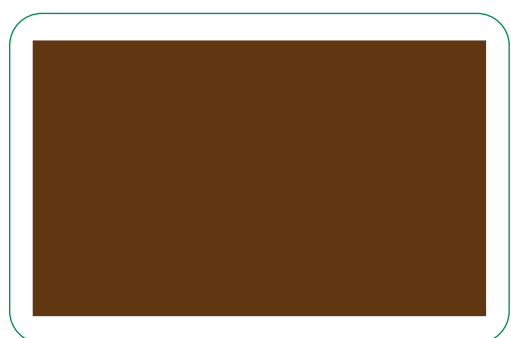
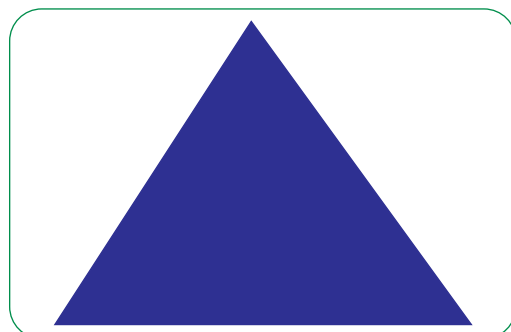
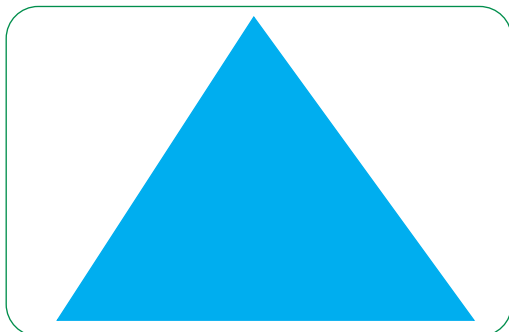
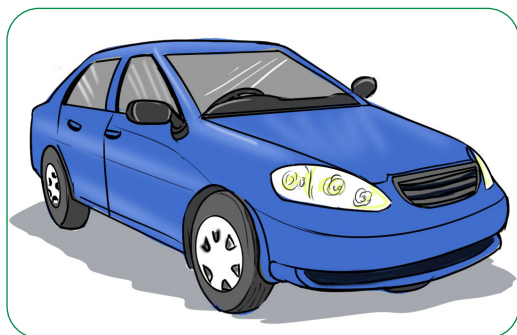
Development Editor: Martha Daka

Authors: Juliet Ururu and Beauty Kwangwari

Matching

Example 1.1

Look at the pictures. What can you see?



Similar objects can be matched.

Practice exercise 1.1

Match the same objects.



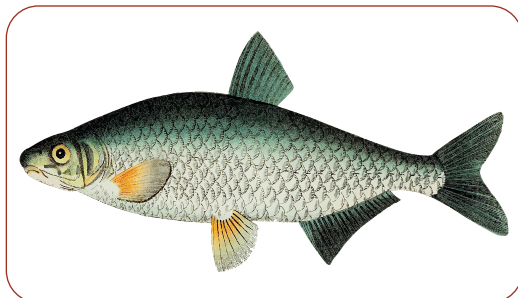
Ordering



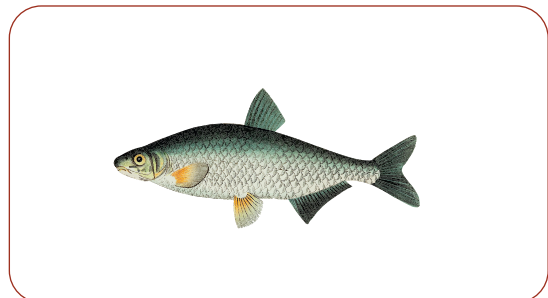
Big ball



Small ball



Big fish



Small fish

Objects can be ordered according to size.

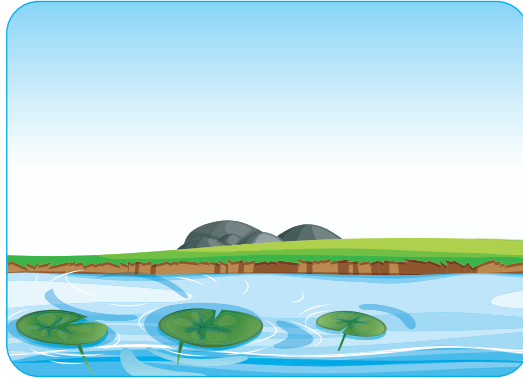
Some objects are small, tall, long and short.

Practice exercise 1.2

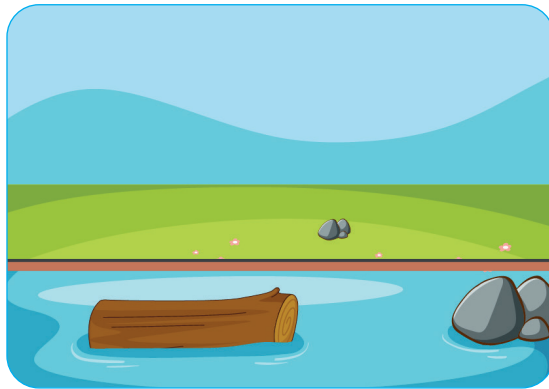


1. The _____ is taller than the _____.
2. The _____ is longer than the _____.
3. The _____ is bigger than the _____.
4. The _____ is smaller than the _____.

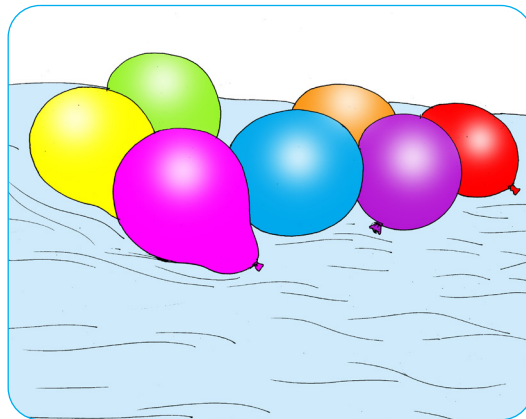
Objects that float on water



A leaf floats on water.

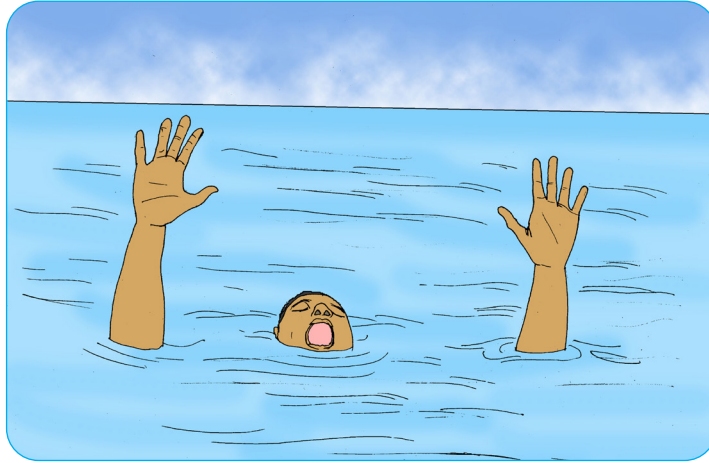


A log floats on water.



Balloons float on water.

Dangers of water



The picture above shows a person who is drowning in water.
Water can be dangerous.



The use of dirty water can lead to diseases.

Practice exercise 3.2

1. A _____ floats in water. (**stone / leaf**)
2. Water is _____. (**colourless / blue**)
3. Do not play in _____ water. (**dirty / clean**)
4. Water can be used for _____. (**burning / drinking**)

Health and Nutrition



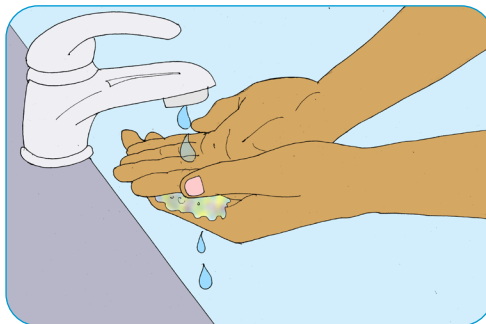
We take care of our body by washing it.



We take care of our body by brushing our teeth.



We take care of our body by combing our hair.



We should always wash our hands before touching food.

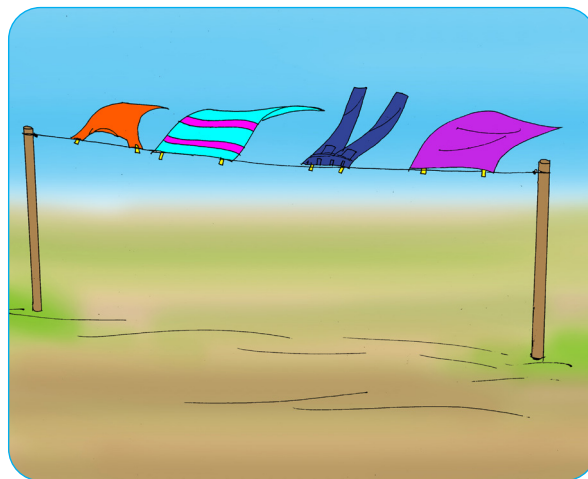


We care for the environment by picking up litter.



We care for the environment by sweeping our environment.

Weather



Weather is what the sky and the air outside are like.
The weather is windy.



It is raining.



The weather is cold.

Practice exercise 3.10

1. I wear a _____ in cold weather. (**sunhat / jersey**)
2. I wear a _____ in rainy weather. (**raincoat / jersey**)

Air

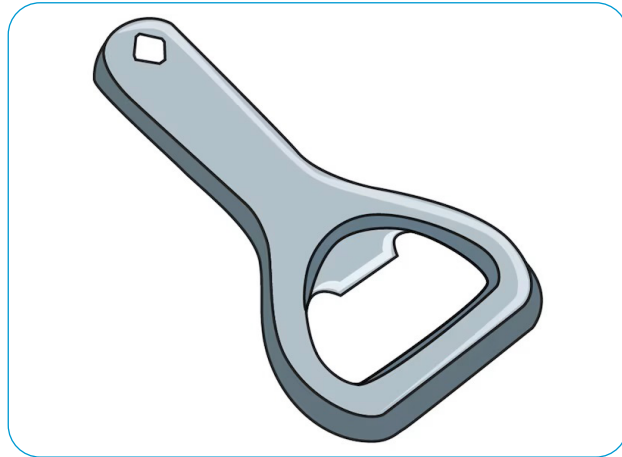
Air is around us.

We cannot see air.

We cannot touch air.

Simple machines

A machine is a tool that makes work easier.



An opener is used to open bottle drinks.

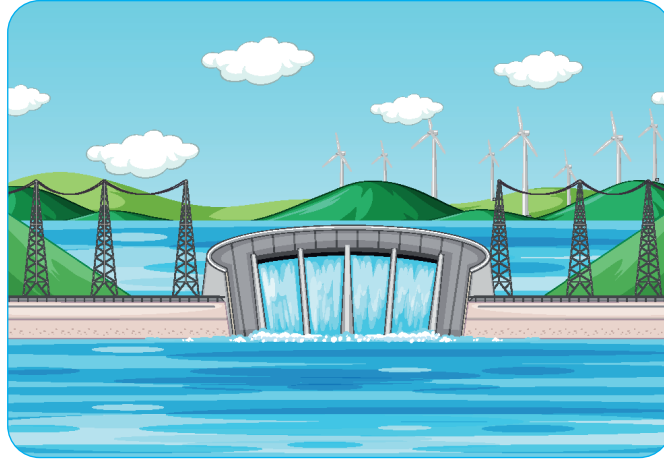


We use a wheelbarrow to carry loads.

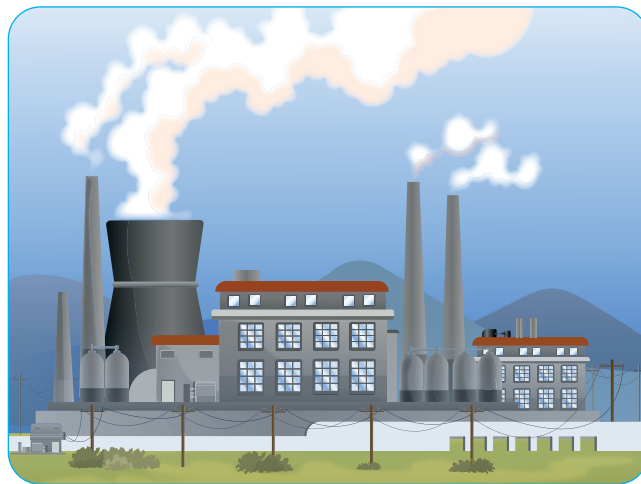


A rake is used for scooping, scraping, gathering or levelling materials, such as soil, mulch or leaves.

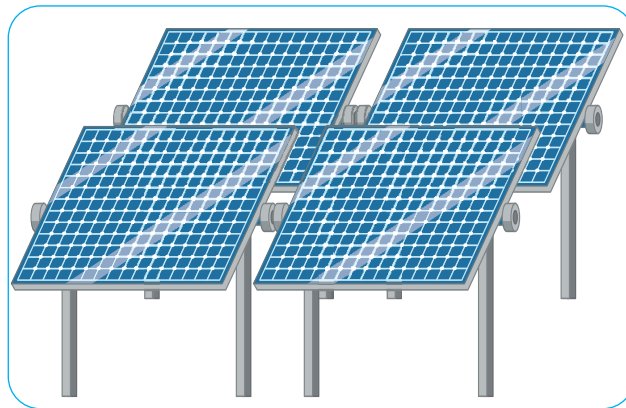
Electricity



We have different forms of electricity.
Electricity made from water is called hydropower energy.



Electricity made from burning coal is called thermal energy.



Electricity made from the sun is called solar energy.

Topic

4

Number concepts

Numbers



Numbers can be written in words.

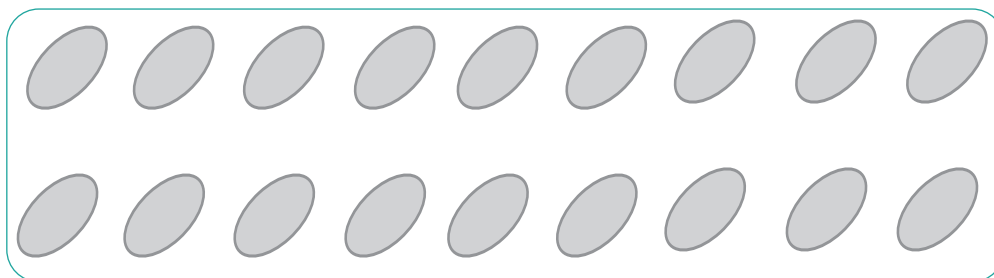
Sets

A set is a collection of objects that have something in common or follow a rule.

Objects in a set can be counted.

Example 4.1

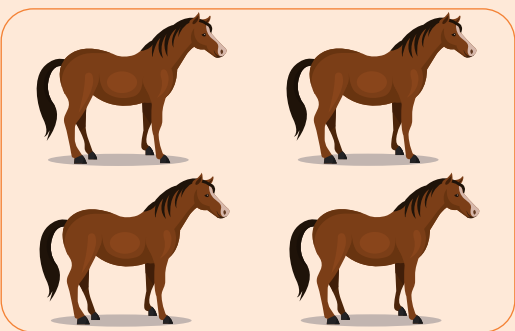
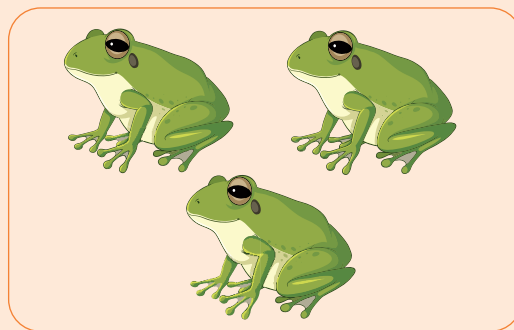
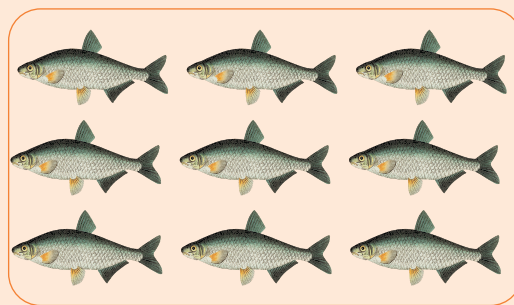
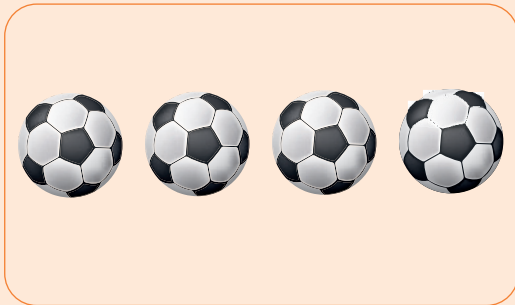
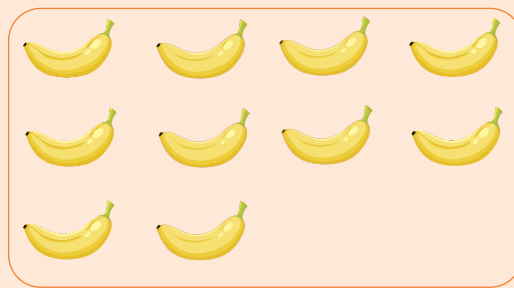
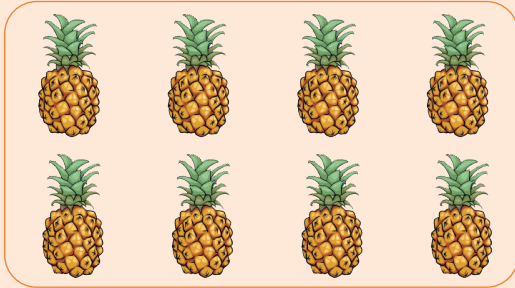
How many objects are in the set below?



There are 18 objects in the set.

Practice exercise 4.1

Count the number of objects in each set.



Arranging numbers

Numbers can be arranged starting from the smallest to the biggest.

Example 4.2

Arrange 2; 1; 7; 4; 3; 5; 10; 9; 8 in order from smallest to biggest.

The answer is 1; 2; 3; 4; 5; 7; 8; 9; 10.

Practice exercise 4.2

Arrange the following in order from smallest to biggest.

1. 9 8 5 7 2

2. 5 0 2 1 6

Comparing numbers

$<$ means less than.

$>$ means greater than.

$=$ means equal to.

Example 4.3

4 is less than 9.

$$4 < 9$$

Example 4.4

12 is greater than 10.

$$12 > 10$$

Example 4.5

9 is equal to 9.

$$9 = 9$$

Practice exercise 4.3

Compare the numbers using $>$, $<$ or $=$.

$$11 \square 20$$

$$2 \square 5$$

$$19 \square 18$$

$$9 \square 1$$

$$12 \square 17$$

$$10 \square 10$$

$$14 \square 15$$

$$8 \square 3$$

$$23 \square 23$$

$$22 \square 29$$

$$30 \square 25$$

$$28 \square 27$$

Rounding off numbers

Example 4.6

Using the number line, round off 7 to the nearest 10.
7 rounded off to the nearest 10 is 10.

Example 4.7

Using the number line, round off 3 to the nearest 10.
3 rounded off to the nearest 10 is 0.

Example 4.8

Using the number line, round off 8 to the nearest 10.
8 rounded off to the nearest 10 is 10.

Example 4.9

Using the number line, round off 12 to the nearest 10.
12 rounded off to the nearest 10 is 10.

Practice exercise 4.4

Round off the following to the nearest 10.

1. 13

2. 46

3. 28

4. 37

5. 17

6. 43

7. 6

8. 50

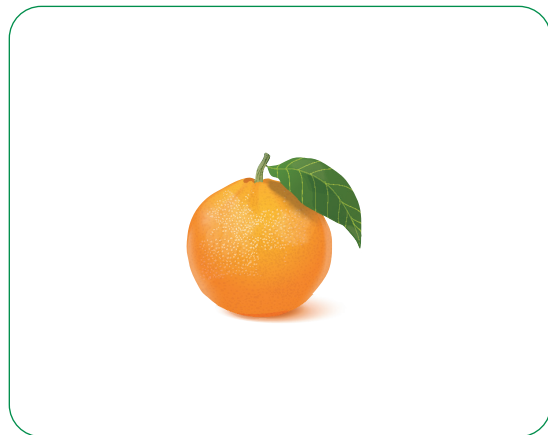
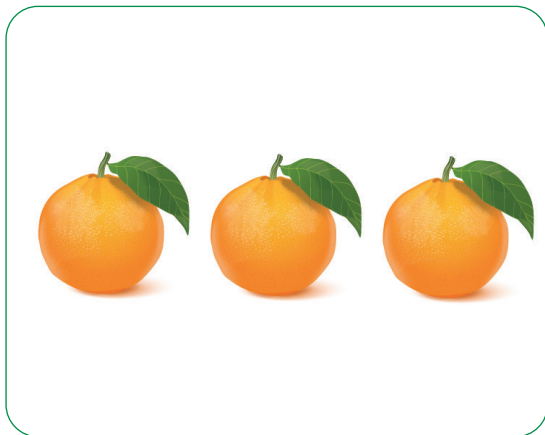
9. 22

10. 1

Addition

Addition is a way of combining things and counting them together as one large group.

Example 5.1



3 oranges and 1 orange make 4 oranges.

Example 5.2

$$3 + 1 = \underline{\quad\quad}$$

$$3 + 1 = 4$$

Example 5.3

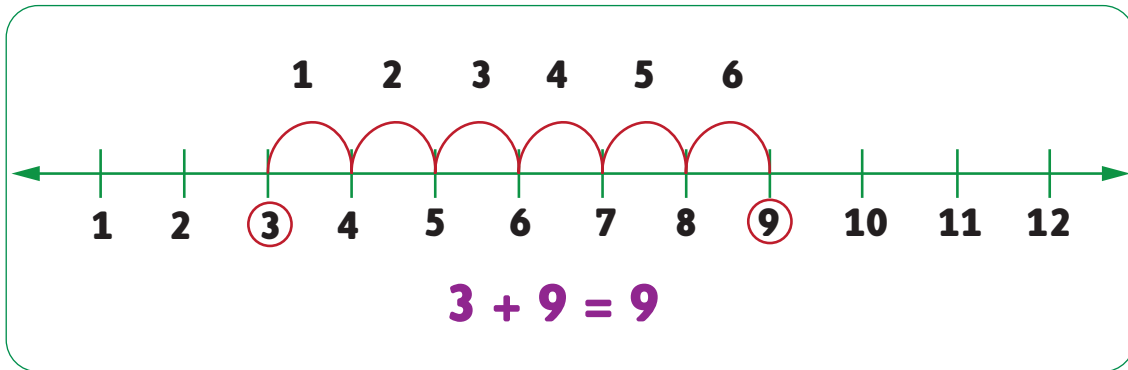
1 and 5 make $\underline{\quad\quad}$.

1 and 5 make 6.

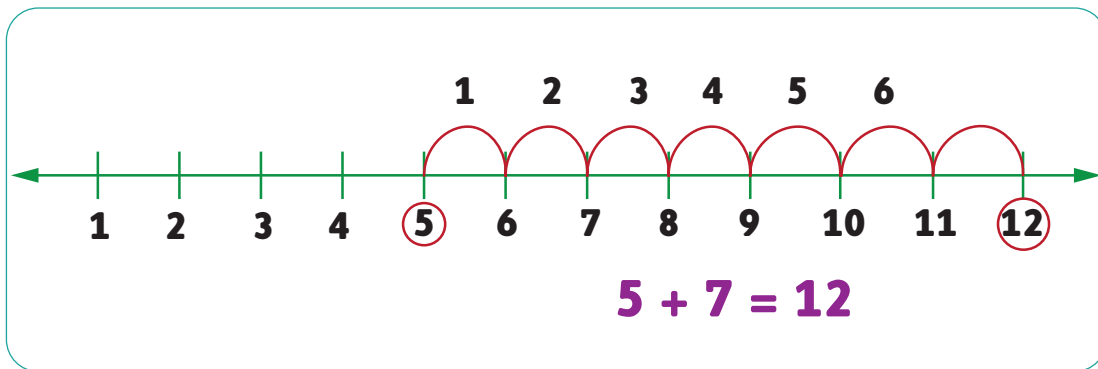
Addition using a number line

A number line can be used to add numbers.

Example 5.10



Example 5.11



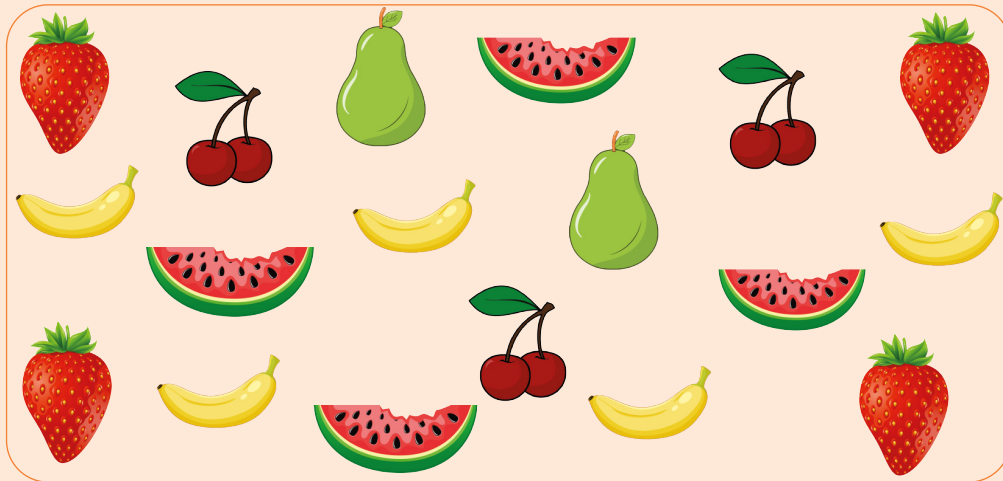
Practice exercise 5.2

Work out the following using a number line.


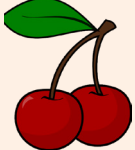
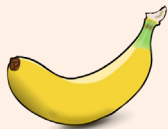


1. 9 count on 7 is _____.
2. 6 plus 2.
3. Find the sum of 1 and 4.
4. Add 2 to 7.
5. $6 + 1$
6. 4 plus 3.

Practice exercise 6.6

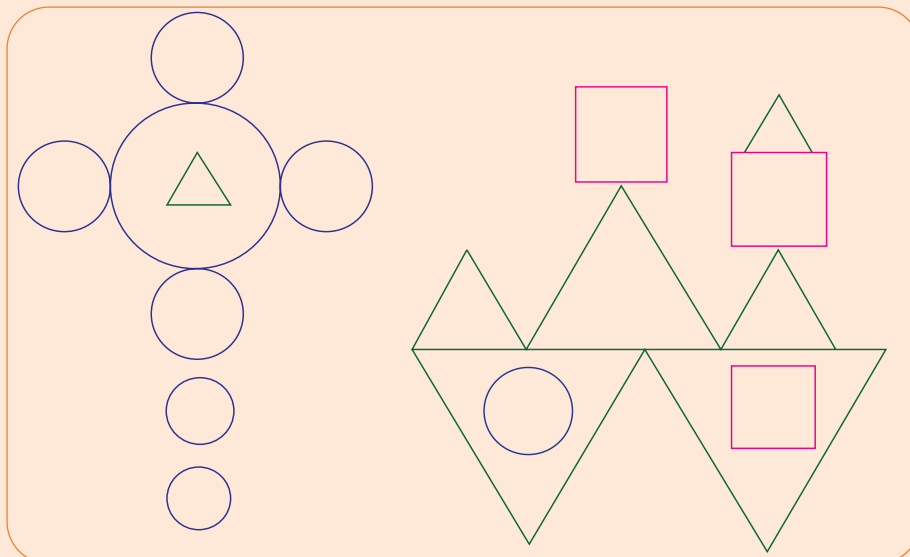
1. Count the given fruits and find how many of each kind.



2. Complete the table below.

Number of fruits					
Fruit					
	Strawberry	Cherries	Banana	Pear	Watermelon

3. Count the shapes in the picture below. Write down the number of each type of shape.



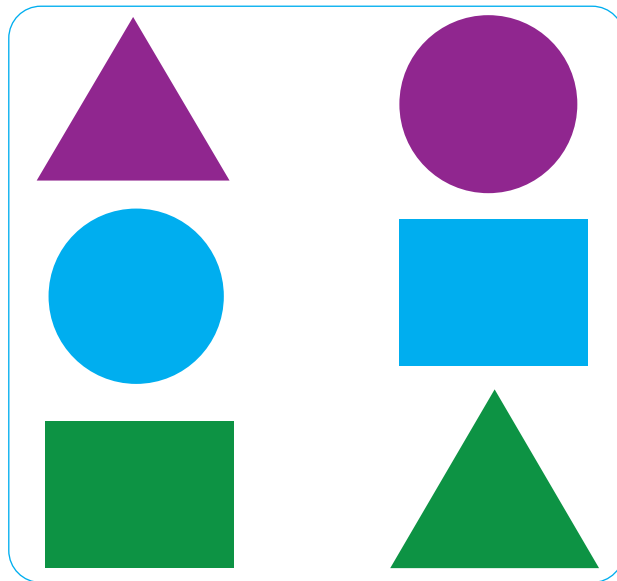
EXAMINATION PRACTICE 1

MATHEMATICS AND SCIENCE

PAPER 1

TIME: 1 HOUR 30 MINUTES

1. Match the objects below.



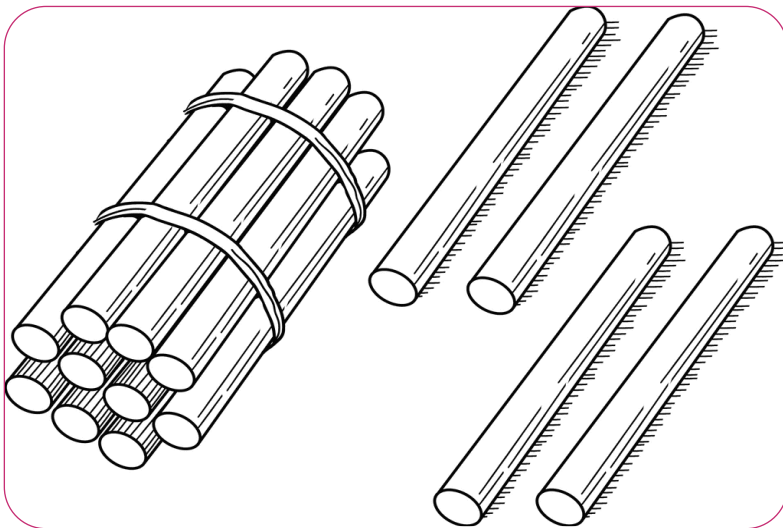
2. Count the objects in the set below. Write down the number.



3. Water is _____. (**white / colourless**)

4.  This is a _____. (**circle / triangle**)

5. The sun gives us _____. (**light / darkness**)
6. Write two in numerals. (**3 / 2**)
7. 7 days make a _____. (**day / week**)
8. I see with my _____. (**eyes / hands**)
9. The first day of the week is _____.
(**Monday / Sunday**)
10. Wild animals live in the _____. (**house / forest**)
11. _____ is short. (**A / B**)
_____ **A**
_____ **B**
12. We get _____ energy from the sun.
(**solar / moon**)
13. How many sticks are shown below?



14. $5c + 5c + 1c =$ _____
15. Blind people cannot _____. (**see / hear**)

EXAMINATION PRACTICE 1

MATHEMATICS AND SCIENCE

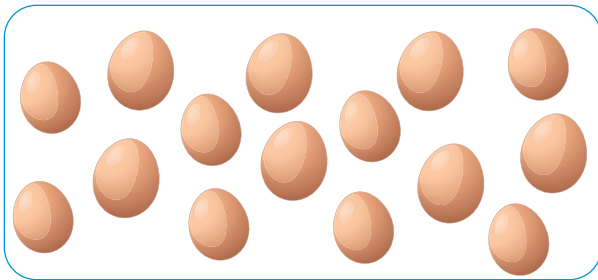
PAPER 2

TIME: 1 HOUR 30 MINUTES

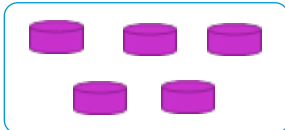
1. Find the missing number.

0 1 2 4 5

2. How many eggs are in the set?

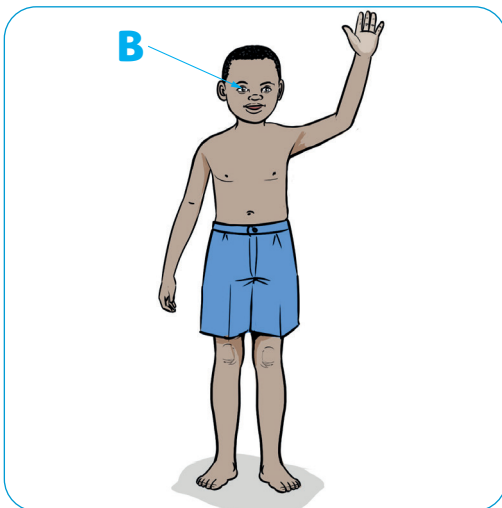


- 3.



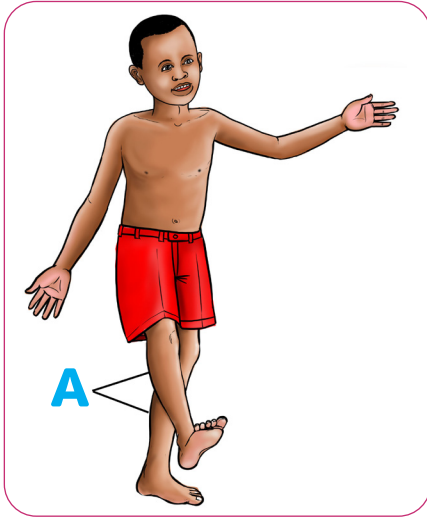
How many objects are in the set?

- 4.



The body part labelled **B** is _____.

5.



Name the body part labelled **A**.

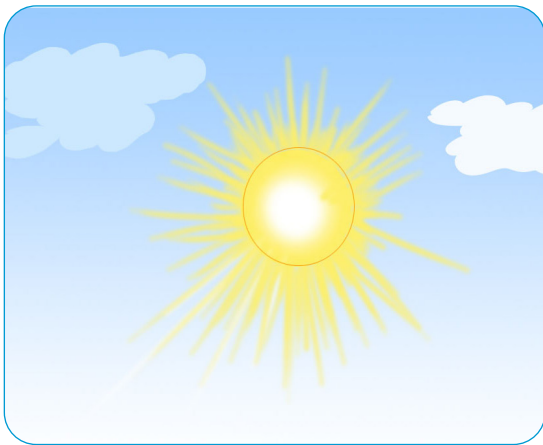
6. Draw a circle.

7. $3 + 4 = \square$

8. 2 and 3 make _____.

9. 5 count back 3 is _____.

10.



It is _____.

EXAMINATION PRACTICE 2

MATHEMATICS AND SCIENCE

PAPER 1

TIME: 1 HOUR 30 MINUTES

1. How many stars are there? **(13 / 10)**



2.



How many doughnuts are there? **(7 / 6)**

3. Fill in the missing number. **(10 / 11)**

2 4 6 8 12 14

4. 6 and 5 make _____. **(12 / 11)**

5. Water makes things _____. **(dry / wet)**

EXAMINATION PRACTICE 8

MATHEMATICS AND SCIENCE

PAPER 2

TIME: 1 HOUR 30 MINUTES

1. Write fifteen in numerals.

2.



Ball **B** is _____.

3. After 10 comes _____.

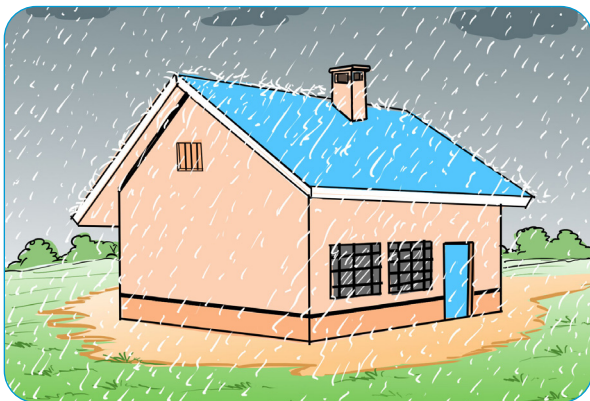
4. $9 + 4 + 3 = \square$

5. $5 - 3 = \square$

6. A _____ lives in a hole. (**dog / snake**)

7. Draw an ant.

8.



It is _____.



Physical Education and Arts

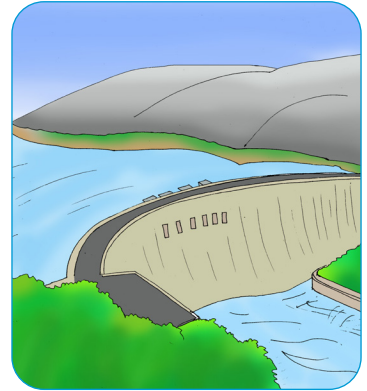
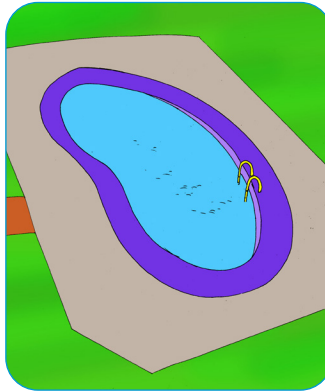
Development Editor: Ray Kanyosola

Authors: Lindsay Lee Kugara and Sithokozile Zvavamwe

Water familiarisation and safety

Aquatic skills are the skills that enable a person to swim in water without difficulty. Such skills allow one to avoid being at risk of drowning in water.

- A water body is a place where water collects in large amounts.



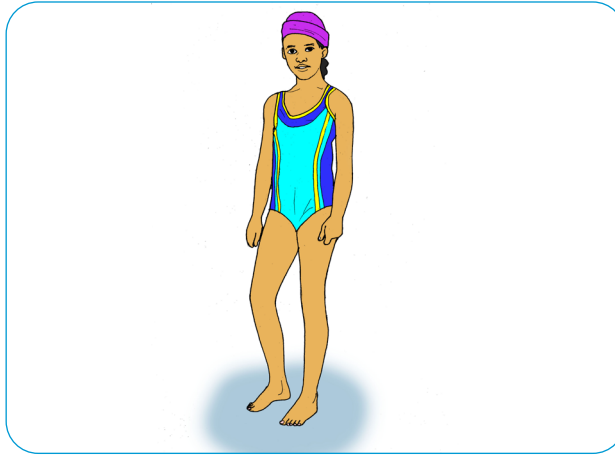
- Examples of water bodies are swimming pools, ponds, rivers and dams.

Water familiarisation

- We can walk in water.
- We use the shallow ends of the swimming pool.
- We can blow bubbles in the water.

Water safety

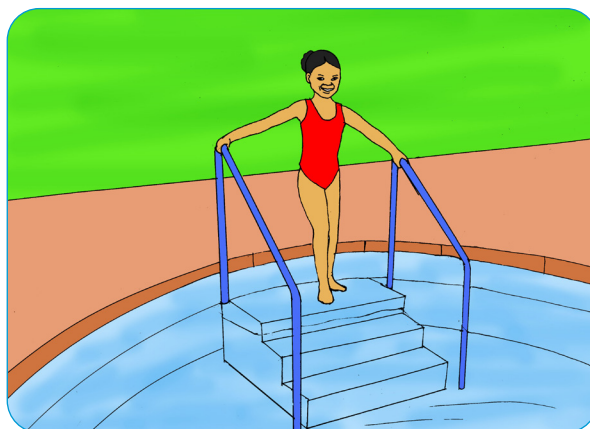
- We can only go for swimming with our teacher or a life saver.



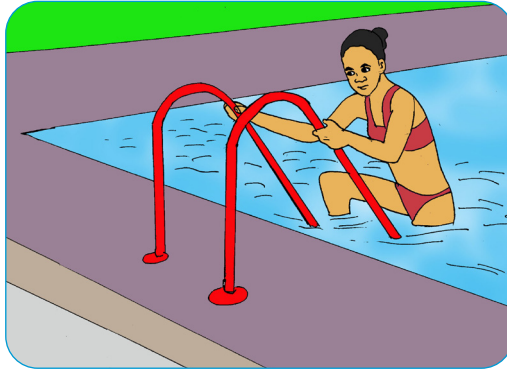
- Always wear the proper swimming attire.
- Do not push each other around the pool.
- Do not swim when it is raining.
- Never eat while in the pool and do not throw litter in or around the pool.

Water entry and exit

- Do not jump into the pool.



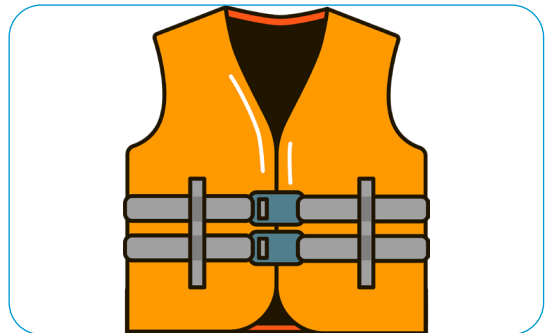
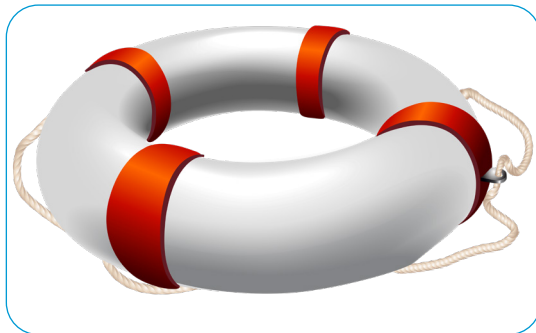
- Use the ladder to enter the pool.



- Use the ladder to exit the pool.
- Make sure you do not fall when entering and exiting the pool.

Floating

- We can float on water.
- We can float without sinking or drowning.



- We relax the body or use floating aids.

Dangerous water sources

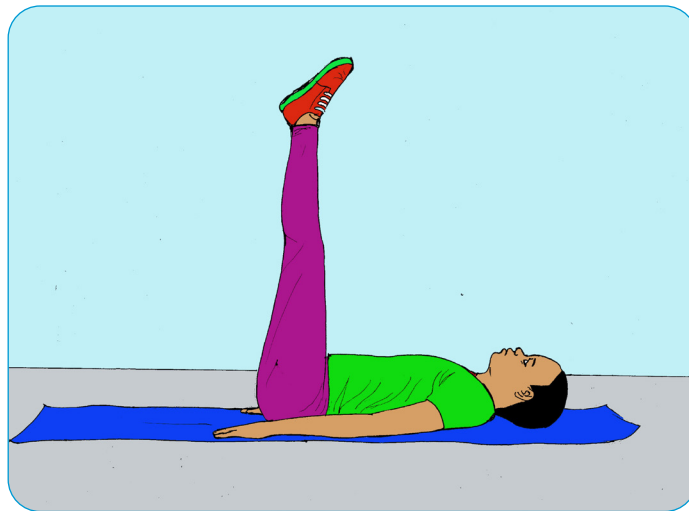
- Some water bodies are not safe for swimming.
- Do not swim in dirty waters.
- Crocodiles are dangerous animals found in dams and rivers.
- Flooded rivers are dangerous.
- We do not swim in flooded rivers.

Balances

Weight bearing/balancing

Balancing is the ability to maintain a position steadily and stable. A person can balance on different body parts.

- Balances can be done individually, in pairs, groups or on apparatus.
- A variety of shapes can be formed when balancing individually, in pairs or groups.
- A person can balance on different body parts.



- We can balance on the back.

History of arts and culture

Music

- Folktale music includes songs that are sung and used when telling or narrating a story.



- Folktale music can be associated with different cultures.
- Folktales were told by grandfathers and grandmothers.
- Folktale music were used for entertainment and education.
- Music is performed at different functions and ceremonies like celebrations, funerals and rituals.

Theatre

- Theatre is performing expressive art for an audience.



- People who perform theatre are called actors and actresses.
- The people who watch theatre being performed are called an audience.



- Examples of theatre are animations, film, fairytales and folktales.

- Theatre can be used to mimic the roles of people in the community such as pastors, teachers, nurses, doctors, farmers, shopkeepers and police officers.
- Community stories based on legends like ***Chaminuka*** and myths such as the ***Nyaminyami*** are used to produce theatre in the community.

Dance

- Different communities have different dance styles.

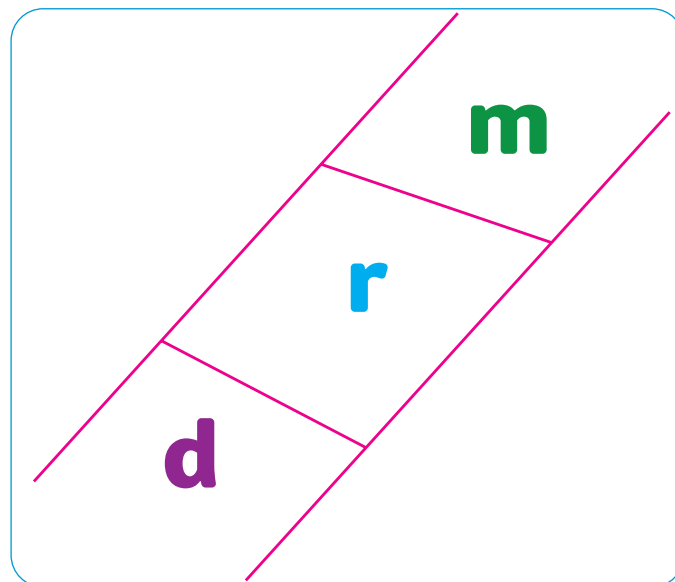


- Examples of dance styles include ***amantshomane (Ndebele)***, ***muchongoyo (Ndau)***, ***jiti (Korekore)*** and ***mbende (Zezuru)***.
- Dances are performed at different celebrations in the community.
- Each dance style has its own costume and attire.
- Dance costumes for dances are guided by culture and type of dance style.

The creative process and performance

Music

- Music has pitch.
- Pitch is how low or high sound is.

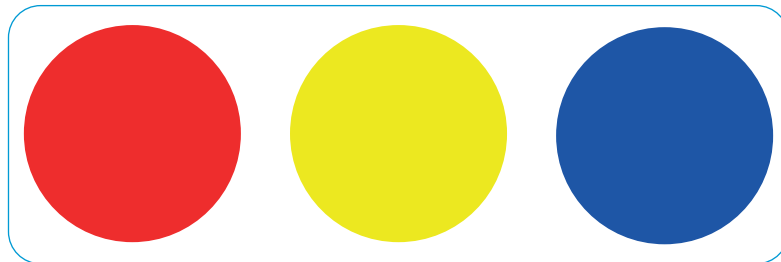


- Pitch rises when one goes up the ladder.
- d has low pitch.
- r has medium pitch.
- m has high pitch.
- Music melodies are grouped into bars.
- The number of bars determines the length of the song.

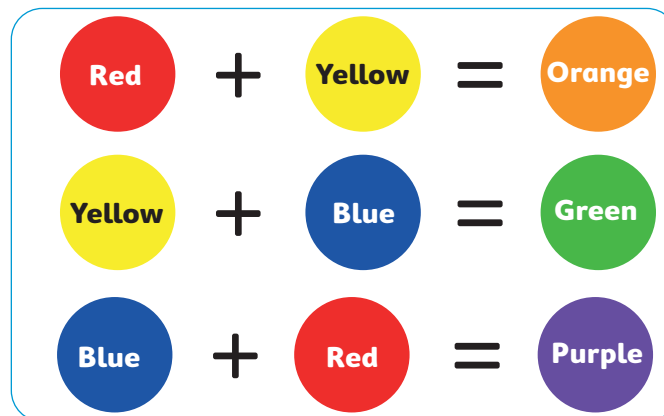
- Basic notes include the minim, crotchet, quavers and semiquavers.

Visual Arts

- Colours can be grouped into primary and secondary classes.



- Primary colours are red, yellow and blue.



- Secondary colours are made from mixing two primary colours in equal amounts.
- Examples of secondary colours are orange, green and purple.

EXAMINATION PRACTICE 1

PHYSICAL EDUCATION AND ARTS

TIME: 1 HOUR 30 MINUTES

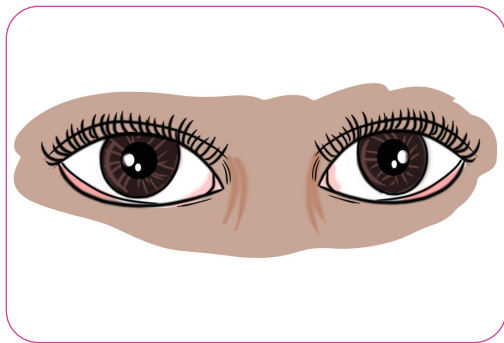
Answer all questions.

Choose the correct answer.

1. We breath with our _____.

(nose / eye)

2.



We see with our _____. **(eyes / legs)**

3. You taste with your _____. **(nose / tongue)**

4. Safety is an act of preventing one from getting

_____. **(hurt / hygiene)**

5. A _____ is a hazardous object in the environment.

(sharp stone / tree)

6. We pick and remove _____ from our environment.

(litter / space)

7.

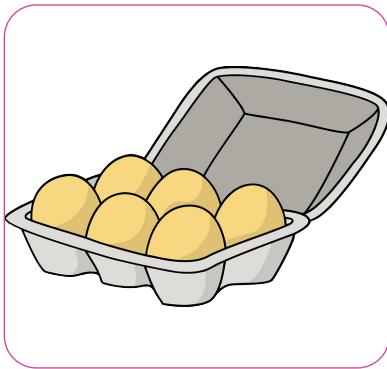


The hygiene practice shown above prevents _____.
(hunger / diseases)

8. It is important to _____ every day to keep our bodies clean. **(bath / eat)**

9. _____ is an example of a healthy exercise.
(Bathing / Running)

10.



The unhealthy food from the ones shown above is _____.
(eggs / pizza)

11. _____ is a musician who sings about cultural issues.
(Albert Nyathi / Enzo Ishall)

12. Animation is a way of making movies using _____.
(images / videos)

13. An example of a cultural dance style is _____.
(Mbende / Clarks)

14. Music melodies are grouped in _____. **(bars / sections)**

15. A colour wheel made of primary colours has _____ colours. **(three / five)**

16. _____ is used to guide movement in dance. **(Rhythm / Costume)**

17. Visual artworks are kept in a _____. **(classroom / gallery)**



_____ effects in theatre are shown in the picture. **(Sound / Lighting)**

19. Lighting effects are used to create _____ in theatre. **(audience / mood)**

20. The _____ improves the quality of sound. **(sound engineer / stage manager)**

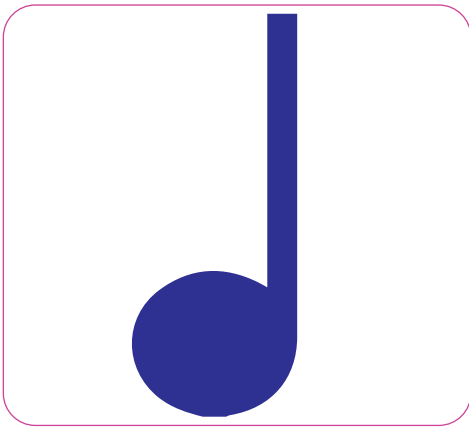
13.



This is a _____ dancer. **(modern / traditional)**

14. Each community has its own style of _____.
(dance / people)

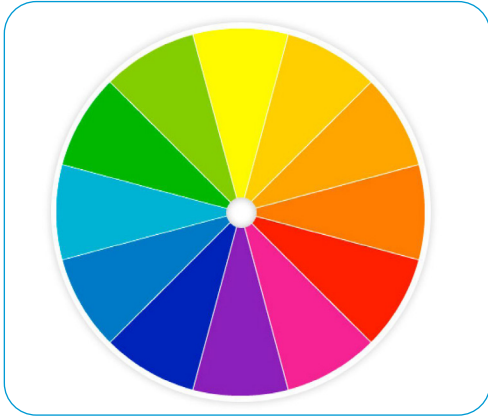
15.



The note shown above is called a _____.
(crotchet / minim)

16. A music form where the lead singer sings and the others sing afterwards is called _____. **(phrases / call and response)**

17.



The artwork shown in the diagram above is called a _____. **(colour wheel / primary colours)**

18. An example of element of design in art is _____. **(colour / repetition)**

19. Which of the following is a secondary colour? **(Red / Purple)**

20. The highest pitch is _____. **(m / d)**

EXAMINATION PRACTICE 7

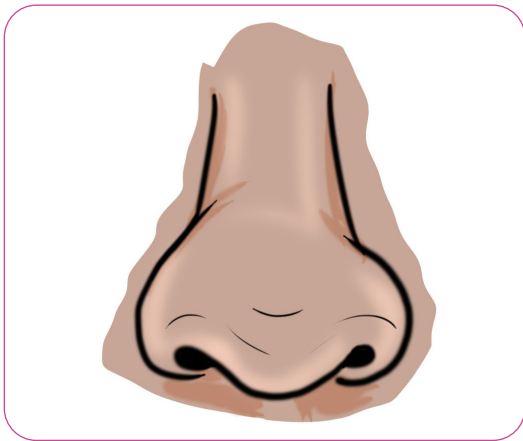
PHYSICAL EDUCATION AND ARTS

TIME: 1 HOUR 30 MINUTES

Answer all questions.

Choose the correct answer.

1.



The body part shown above is used for _____.

(eating / breathing)

2. We should keep our _____ short. **(teeth / nails)**

3. A human being has _____ eyes. **(two / four)**

4. The safest way of getting into a swimming pool is by _____.
(diving in / using the stairs)

5. You should brush your _____ everyday.
(hair / mouth)

12. Music can be used to _____ ideas.
(communicate / draw)

13.



The artwork in the diagram is a _____.
(painting / drawing)

14. _____ is an element of design in art. (Form / Shape)

15. People can come up with the _____ of an artwork in a gallery. (meaning / price)

16. The speed of performing a dance is also called the _____. (level / tempo)

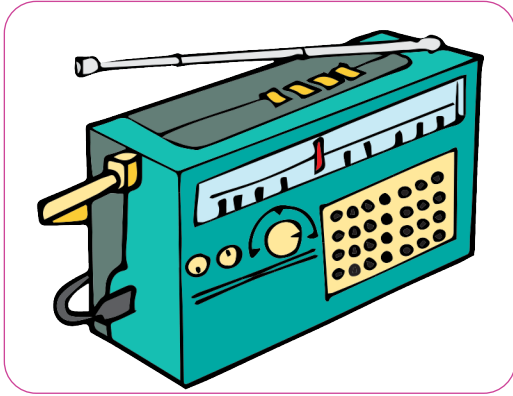
17. Dance can be used to _____ ideas.
(communicate / destroy)

18.



The music note shown is a _____. (semiquaver / crotchet)

19.



The apparatus shown is used to _____ to music.
(kick / listen)

20.

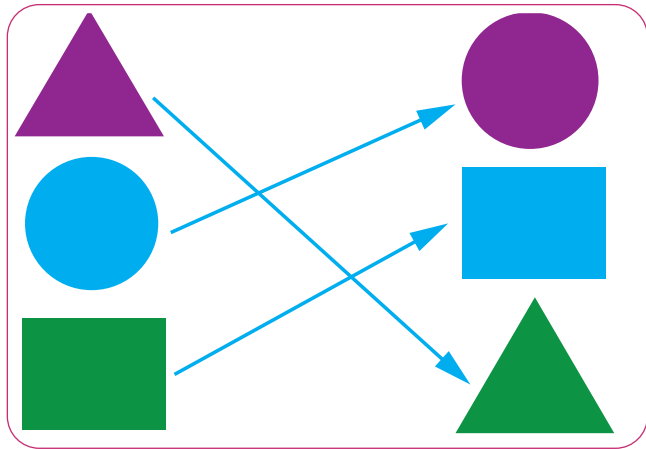


Which of the above is not a technological art tool?
(scanner / crayons)

- 2. Circle-8
- Triangle-7
- Square-3

Examination 1 Paper 1 Answers

- 1. Match the objects below.



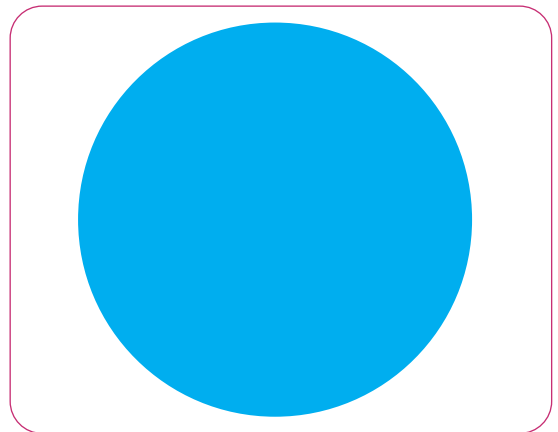
- 2. 5
- 3. colourless
- 4. triangle
- 5. light
- 6. 2
- 7. week
- 8. eyes
- 9. Sunday
- 10. forest
- 11. B
- 12. solar
- 13. 14

- 14. 11c
- 15. see
- 16. 9
- 17. 4 tens 7 units
- 18. water
- 19. nose
- 20. green

Examination 1 Paper 2 Answers

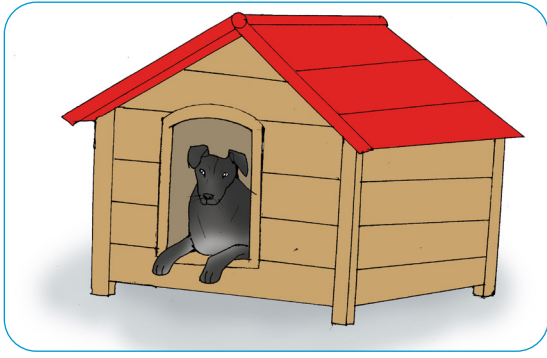
- 1. 3
- 2. 15
- 3. 5
- 4. eyes
- 5. legs

6.



- 7. 7
- 8. 5
- 9. 2
- 10. sunny

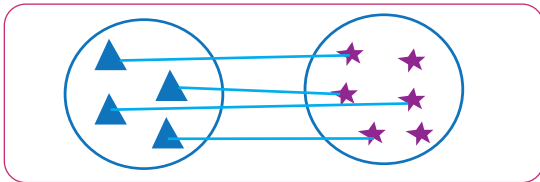
9.



10. flower

Examination 6 Paper 1 Answers

1.



2. A

3. 17

4. 15

5. 10

6. 18

7. 7

8. faster

9. heavier

10. Saturday

11. two

12. float

13. after

14. peach

15. garden

16. nest

17. Sheep

18. Worm

19. raining

20. air

Examination 6 Paper 2 Answers

1.



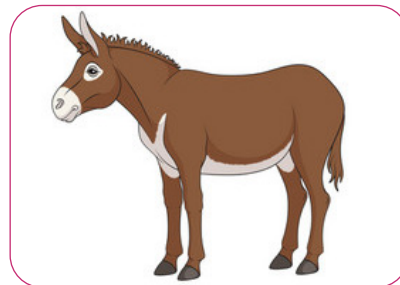
2. 10

3. Seven

4. 0

5. =

6.



7. cook, drink, wash

8. colourless, shapeless,
tasteless

ANSWERS

EXAMINATION 1 ANSWERS

1. Eyes
2. See
3. Tongue
4. Hurt
5. Sharp stone
6. Litter
7. Diseases
8. Bath
9. Running
10. Pizza
11. Albert Nyathi
12. Images
13. Mbende
14. Echoes
15. Three
16. Rhythm
17. Gallery
18. Lighting
19. Mood
20. Sound engineer

EXAMINATION 2 ANSWERS

1. Space
2. Skipping rope
3. Hands
4. Leg
5. Water body
6. Bilharzia
7. Goggles
8. Head
9. Three
10. Apparatus
11. Shapes
12. Paint
13. Movement
14. Cultures
15. Wood
16. Pitch
17. Low
18. Pantomime
19. Picture
20. Sequence