



**basic education**

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Department:  
Basic Education  
**REPUBLIC OF SOUTH AFRICA**

# **ANNUAL NATIONAL ASSESSMENT 2013**

## **GRADE 4**

### **MATHEMATICS EXEMPLAR QUESTIONS**

**This booklet consists of 12 pages, excluding the cover page.**

## **GUIDELINES FOR THE USE OF ANA EXEMPLARS QUESTIONS**

### **1. How to use the exemplar questions**

While the exemplar questions for a grade and a subject have been compiled into one comprehensive set, **the learner does not have to respond to the whole set in one sitting. The teacher should select exemplar questions that are relevant to the planned lesson at any given time.** Carefully selected individual exemplar questions, or a manageable group of questions, can be used at different stages of the teaching and learning process as follows:

- 1.1 At the beginning of a lesson as a diagnostic test to identify learner strengths and weaknesses. The **diagnosis** must lead to prompt **feedback** to learners and the development of **appropriate lessons** that address the identified weaknesses and consolidate the strengths. The diagnostic test could be given as homework to save instructional time in class.
- 1.2 During the lesson as short formative tests to assess whether learners are developing the intended knowledge and skills as the lesson progresses and ensure that no learner is left behind.
- 1.3 At the completion of a lesson or series of lessons as a summative test to assess if the learners have gained adequate understanding and can apply the knowledge and skills acquired in the completed lesson(s). Feedback to learners must be given promptly while the teacher decides on whether there are areas of the lesson(s) that need to be revisited to consolidate particular knowledge and skills.
- 1.4 At all stages to expose learners to different techniques of assessing or questioning, e.g. how to answer multiple-choice (MC) questions, open-ended (OE) or free-response (FR) questions, short-answer questions, etc.

While diagnostic and formative tests may be shorter in terms of the number of questions included, the summative test will include relatively more questions, depending on the work that has been covered at a particular point in time. It is important to ensure that learners eventually get sufficient practice in responding to the exemplar questions.

### **2. Memoranda or marking guidelines**

A typical example of the expected responses (marking guidelines) has been given for each exemplar question and for the ANA model test. Teachers must bear in mind that the marking guidelines can in no way be exhaustive. They can only provide broad principles of expected responses and teachers must interrogate and reward acceptable options and variations of the acceptable response(s) given by learners.

### **3. Curriculum coverage**

It is extremely critical that the curriculum must be covered in full in every class. The exemplar questions for each grade and subject do not represent the entire curriculum. They merely **sample** important knowledge and skills and covers work relating to terms 1, 2 and 3 of the school year.

1. Circle the letter of the correct answer.

1.1 The value of the underlined digit in 5 565 is:

- A 500
- B 50
- C 5
- D 5 000

(1)

1.2 What is the value of the underlined digit in 7 999?

- A 90
- B 9
- C 900
- D 9 000

(1)

1.3 Which number is missing in the following number pattern?  
1 215 ; 1 230 ; \_\_\_\_\_ ; 1 260.

- A 1 240
- B 1 235
- C 1 245
- D 1 255

(1)

1.4 The next number in the number sequence 1 766; 1 866; 1 966; ... is:

- A 2 166
- B 2 066
- C 1 266
- D 1 366

(1)

- 1.5 6 423 rounded off to the nearest 100 is:
- A 6 400
  - B 6 425
  - C 6 430
  - D 6 420
- (1)

- 1.6 The number 1 542 rounded off to the nearest 1 000 is ...
- A 1 500
  - B 1 000
  - C 2 500
  - D 2 000
- (1)

- 1.7 Which number in place of # will make this number sentence true?
- $15 \div 5 = \# \div 15$
- A 5
  - B 15
  - C 30
  - D 45
- (1)

- 1.8 3 is a factor of ...
- A 12
  - B 10
  - C 16
  - D 13
- (1)

- 1.9 Which number is not a multiple of 9?
- A 27
  - B 56
  - C 72
  - D 36
- (1)

1.10 Which number is not a factor of 6?

A 3

B 6

C 12

D 2

(1)

1.11 Jacob is 4 years old and Julie is 12 years old. The ratio of Jacob's age to Julie's age is ...

A 3 : 1

B 1 : 3

C 12 : 16

D 16 : 4

(1)

1.12 Matthew is 16 years old and Sue is 14 years old. The ratio of Matthew's age to Sue's age is ...

A 7 : 8

B 8 : 7

C 16 : 30

D 8 : 14

(1)

2. Complete:

2.1 4 330 rounded off to the nearest 100 is \_\_\_\_\_.

(1)

2.2 7 625 rounded off to the nearest 1 000 ~~R~~ \_\_\_\_\_.

(1)

3. Answer the following questions.

3.1 The value of the underlined digit in 7 631 is ...

(1)

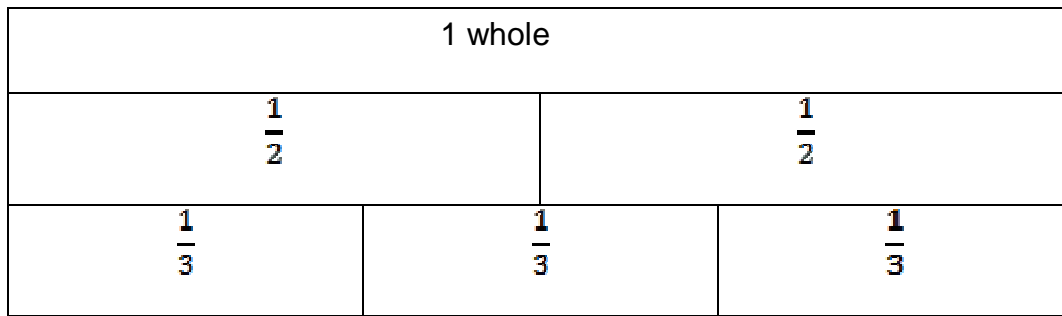
3.2 Write the value of the underlined digit in 7 894.

(1)

4. Complete by writing the following number in expanded notation:  
 $1\ 515 = (1 \times 1\ 000) + ( \quad \times 100) + ( 1 \times \quad ) + ( 5 \times 1)$  (2)
5. Which number is written in expanded notation as  
 $( 4 \times 1\ 000) + (5 \times 100) + (8 \times 10) + (2 \times 1)$ ? (1)
6. Which number is written as:  
 $(6 \times 100) + (8 \times 1\ 000) + (1 \times 1) + (2 \times 10)$  in expanded notation? (1)
7. Calculate:
- 7.1  $2\ 036 + 1\ 055$  (2)
- 7.2  $3\ 846 + 3\ 217$  (2)
- 7.3  $2\ 752 + 4\ 356$  (2)
- 7.4  $2\ 158 - 526$  (2)
- 7.5  $4\ 000 - 1\ 481$  (2)
- 7.6  $5\ 726 - 1\ 334$  (2)
- 7.7  $83 \times 15$  (3)
- 7.8  $48 \times 12$  (3)
- 7.9  $698 \div 7$  (3)
- 7.10  $936 \div 3$  (3)
8. Complete the number sentence:  $2 \times 6 = 4 \times \underline{\hspace{2cm}}$  (1)

9. Answer each of the following questions.
- 9.1 Tasneem bought sweets for 35 of her friends. If each sweet costs R1,30, how much did Tasneem spend altogether? (2)
- 9.2 Tasneem paid with a R50,00 banknote. How much change should she have received? (1)
10. Jabu wants to buy a T-shirt for R86,99 and a poster for R25,89.
- 10.1 How much will this cost altogether? (2)
- 10.2 Jabu only has R100,00 in his wallet. How much more money does he need to buy a T-shirt and a poster? (1)
11. Simplify: (1)
- $$\frac{2}{10} + \frac{3}{10} = \underline{\hspace{2cm}}$$
12. What is  $\frac{3}{4} + \frac{1}{4} - \frac{2}{4}$  equal to? (2)
13. Ismail had a bar of chocolate consisting of 6 blocks. He ate 2 blocks. What fraction of the chocolate bar was left? (1)
14. Mum baked a cake and cut it into 6 equal pieces. Dad had 2 pieces. You had 1 piece. What fraction of the cake is left? (2)
15. Lauren first eats  $\frac{1}{8}$  of a chocolate cake before supper, and then eats another  $\frac{1}{8}$  after supper.
- 15.1 What fraction of the chocolate cake did she eat altogether? (2)
- 15.2 What fraction of the chocolate cake was left? (2)

16. Use the fraction wall to answer the question.



$\frac{3}{3} =$  \_\_\_\_\_ (1)

17. Write down a number sentence for each of the following word sums.

17.1 Nabeelah and Nomsa each have fifteen dolls. How many dolls do they have altogether? (1)

17.2 Yusuf has R84,00 to buy chocolates for his friends. One chocolate costs R6,00. How many chocolates can he buy? (1)

18. Complete the following patterns.

18.1 9 000 ; 8 975 ; \_\_\_\_\_ ; \_\_\_\_\_ ; 8 900. (1)

18.2 0 Δ Ø 0 \_\_\_\_\_ . (1)

19. Complete the following number chain. (1)

8 255  $\xrightarrow{-2}$  \_\_\_\_\_  $\xrightarrow{-7}$  \_\_\_\_\_  $\xrightarrow{-9}$  \_\_\_\_\_ . (1)



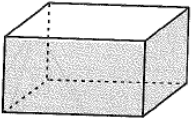
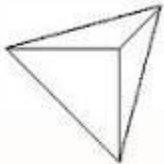
20. Complete the tables below:

20.1

NAME OF 2-D SHAPE	NUMBER OF STRAIGHT SIDES
_____	5
_____	6

(2)

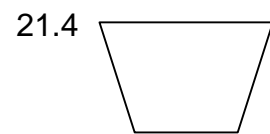
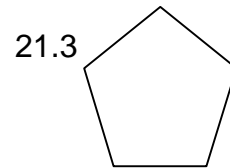
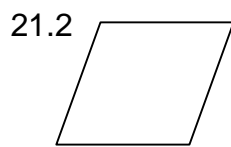
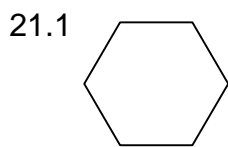
20.2

3-D OBJECT	NAME OF OBJECT	SHAPE OF THE FACES
	Rectangular Prism	_____
	_____	_____

(3)

21. Use the names given in the table to name the 2-D shapes.

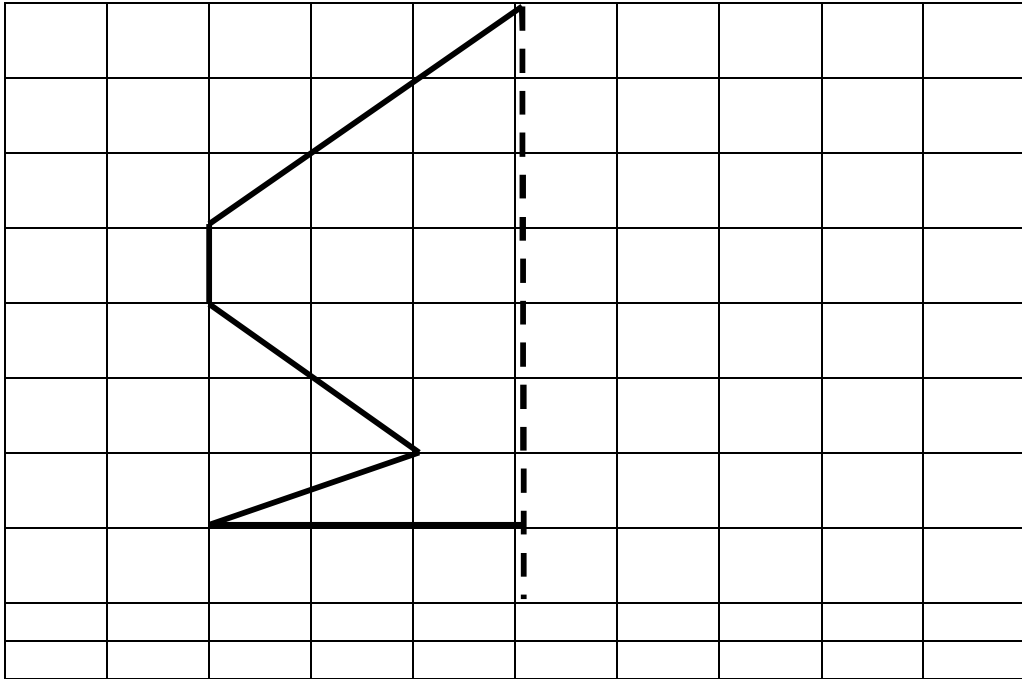
Trapezium	Pentagon
Parallelogram	Hexagon



\_\_\_\_\_

(4)

22. Draw the right-hand side of the sketch to make a symmetrical 2-D shape.



(1)

23. Only colour in the house(s) that has/have a symmetrical shape

a.



b.

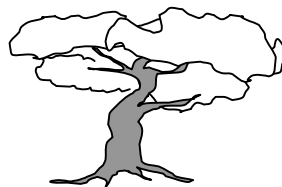
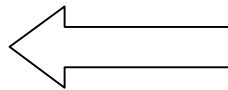


c.



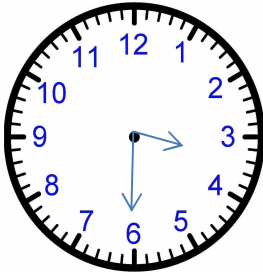
(2)

24. Draw in the line(s) of symmetry for those pictures which you think are symmetrical.



(3)

25. Write down the time shown, in the afternoon, on the following clock face.



\_\_\_\_\_

(1)

26. Complete:

26.1 1 year = \_\_\_\_\_ weeks

(1)

26.2 1 year = \_\_\_\_\_ months

(1)

26.3 1 cm = \_\_\_\_\_ mm

(1)

26.4 1 km = \_\_\_\_\_ m

(1)

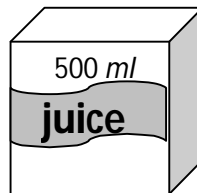
27. Use the letters A, B, C and D to order the capacities shown in the containers from the most to the least.



A



B



C



D

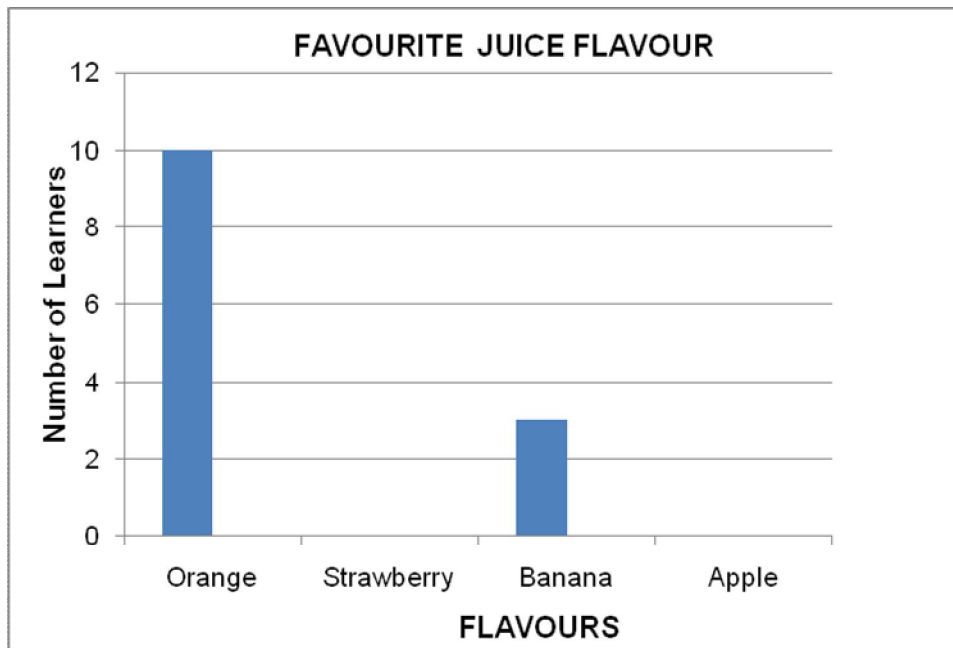
\_\_\_\_\_

(2)

28. A survey was conducted amongst Grade 4 learners to determine their favourite flavour of juice. Each pupil could vote only once for their favourite flavour.

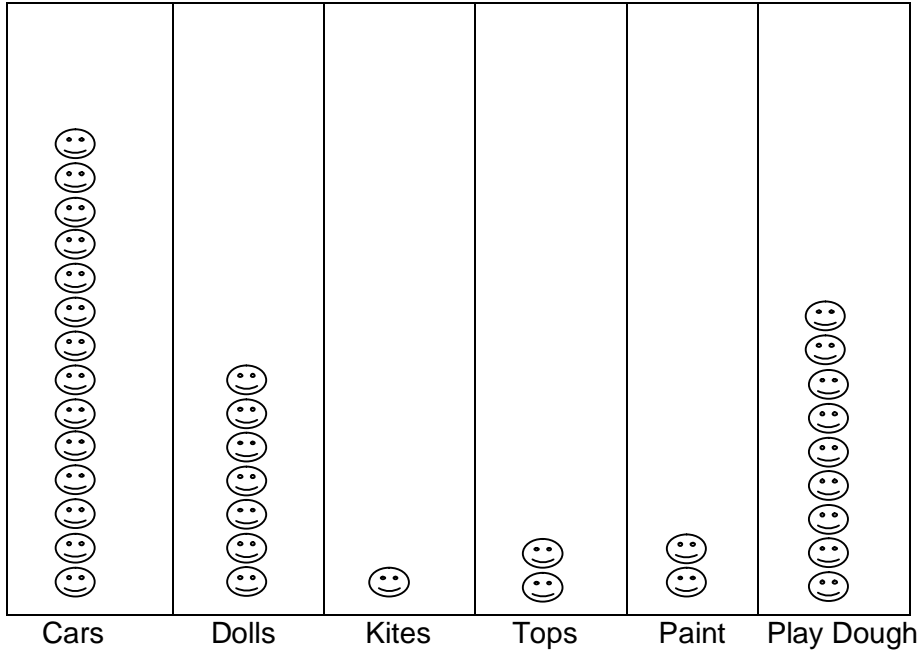
FLAVOUR OF JUICE	TALLY MARKS	FREQUENCY
Orange		10
Strawberry		8
Banana	III	3
Apple		5

- 28.1 Fill in the missing tally marks in the above table. (2)
- 28.2 Which flavour was liked the least? (1)
- 28.3 Complete the bar graph.



(2)

29. The pictograph shows the popular toys amongst learners.



**KEY- 1 face represents 5 learners.**

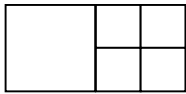
29.1 Which toy is the most popular? (1)

29.2 Which toy is the least popular? (1)

29.3 How many learners chose play dough? (1)

29.4 How many more learners prefer dolls to tops? (1)

30. How many squares are there in the diagram altogether?



\_\_\_\_\_

(2)