

GRADE 2

TERM 3 2018

MATHEMATICS
ENGLISH / ISIXHOSA

RESOURCE PACK

PRINTABLE RESOURCES

Resource Sheets

This is a list of the mathematical resources that you will need this term. You need to make sure that you have them for the lessons for which they are recommended.

1. Template for pictograph (Lesson 19)
2. 1–200 number board (Lessons 22 and 23)
3. Fraction wall (Lesson 28)
4. Fraction circles (Lesson 28)
5. Fraction strips (Lesson 31)
6. Analogue clock faces (Lessons 32 and 33)
7. Views (Lesson 38)

Resources for each day of teaching

There are also other resources such as informal resources (old magazines, pieces of string, scrap paper, etc.) that you may need in certain lessons. You should have a careful look at the list of resources needed for each lesson; this list is given in the lesson plans each day. Prepare yourself, so that you have the necessary resources for the lessons on a daily basis.

1. Template for pictograph (Lesson 19)

2. 1–200 number board (Lessons 22 and 23)

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	100
111	112	113	114	115	116	117	118	119	120
121	122	123	124	125	126	127	128	129	130
131	132	133	134	135	136	137	138	139	140
141	142	143	144	145	146	147	148	149	150
151	152	153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168	169	170
171	172	173	174	175	176	177	178	179	180
181	182	183	184	185	186	187	188	189	190
191	192	193	194	195	196	197	198	199	200

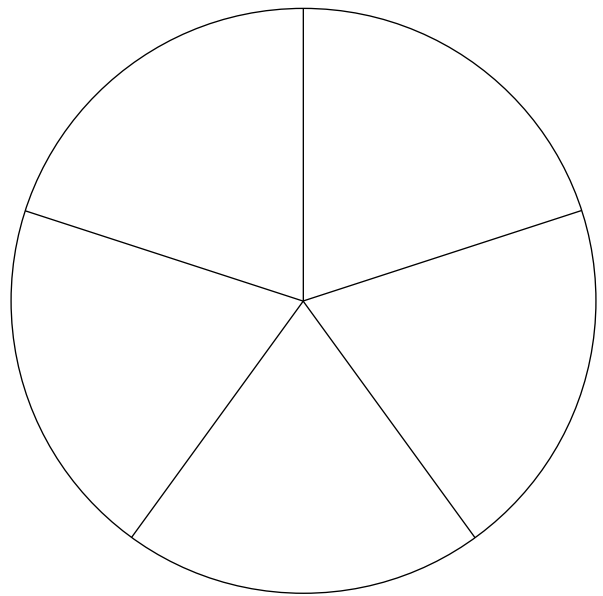
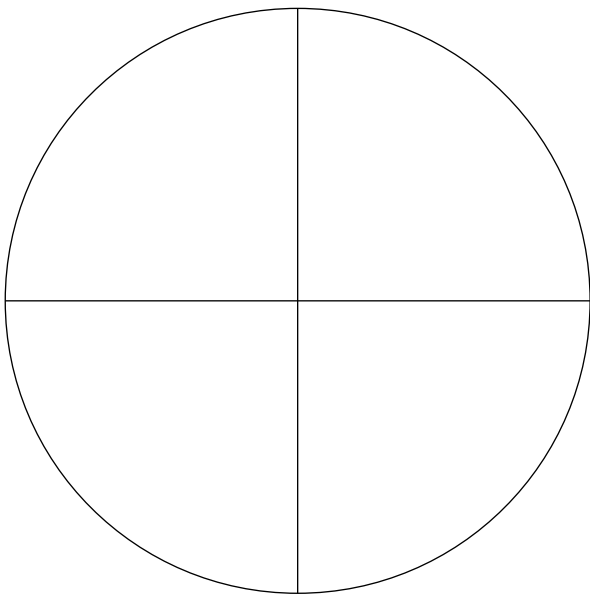
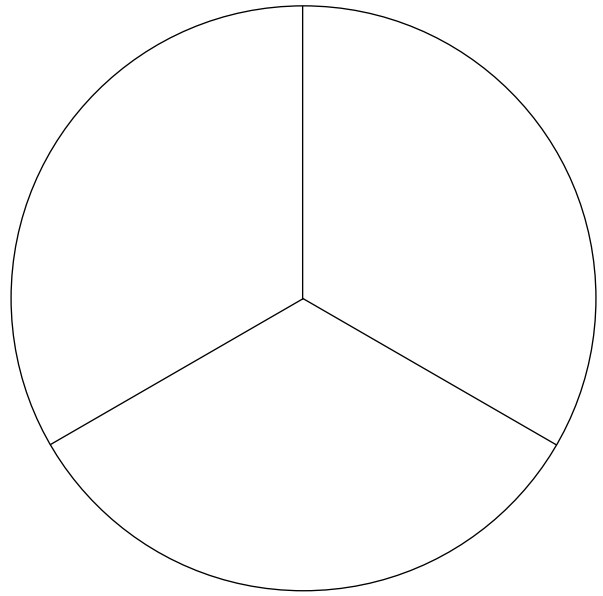
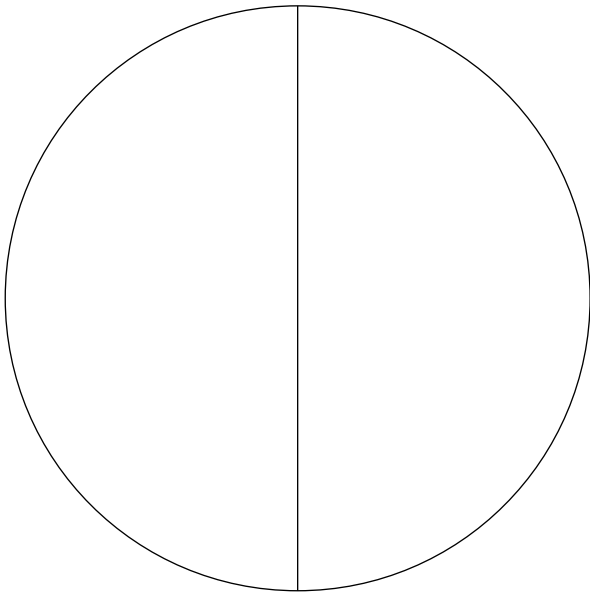
3. Fraction wall (Lesson 28)

1 whole				
1 half		1 half		
1 third	1 third		1 third	
1 quarter	1 quarter	1 quarter	1 quarter	
1 fifth	1 fifth	1 fifth	1 fifth	1 fifth

3. Udonga lwamaqhezu (Isifundo 28)

into e-l epheleleyo				
ihafu e-l		ihafu e-l		
isithathu esi-l	isithathu esi-l		isithathu esi-l	
ikota e-l	ikota e-l	ikota e-l	ikota e-l	
isihlanu esi-l	isihlanu esi-l	isihlanu esi-l	isihlanu esi-l	isihlanu esi-l

4. Fraction circles (Lessons 28, 31)



5. Fraction strips (Lessons 28, 31)

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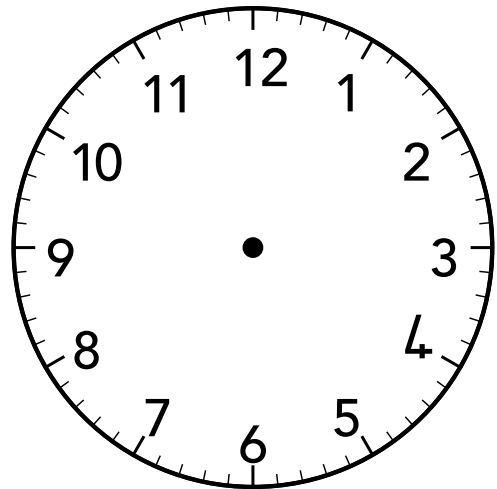
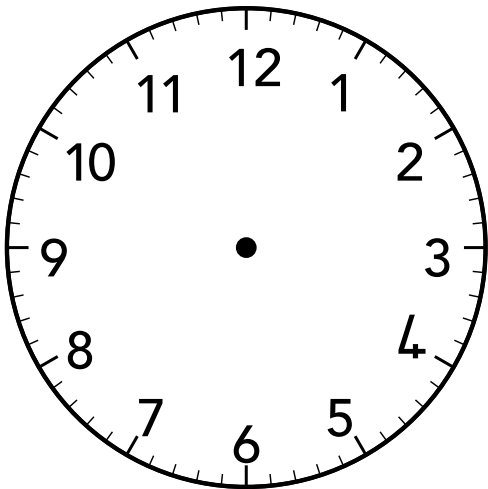
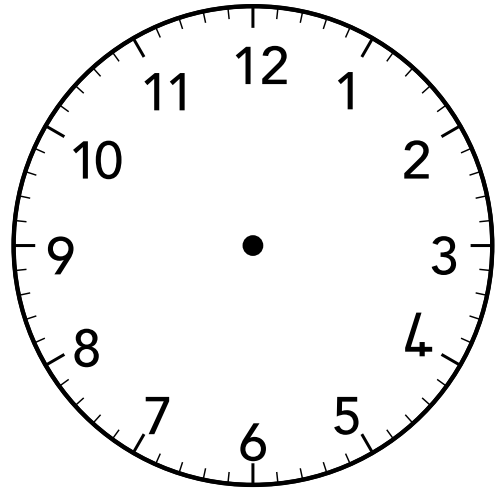
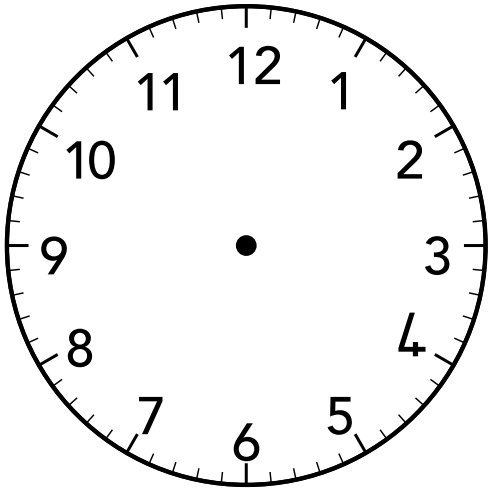
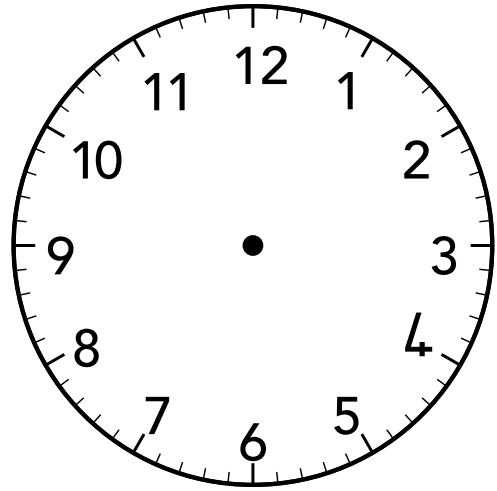
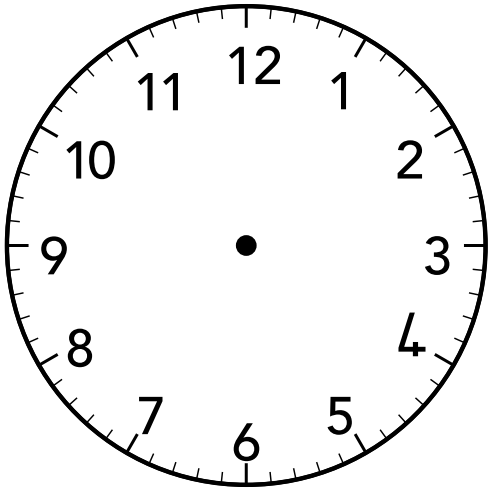
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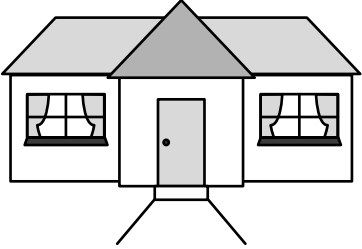
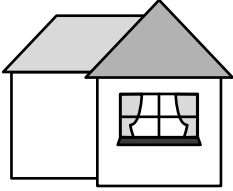
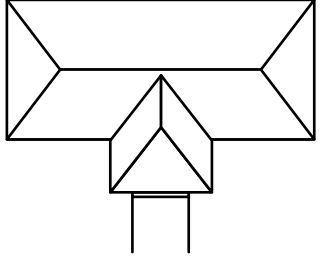
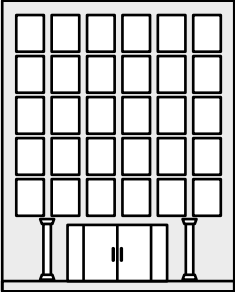
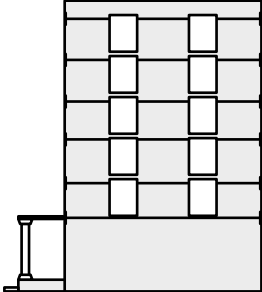
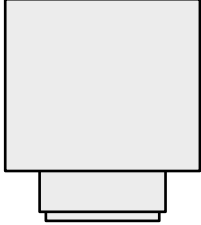


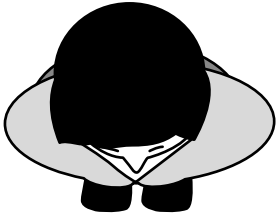
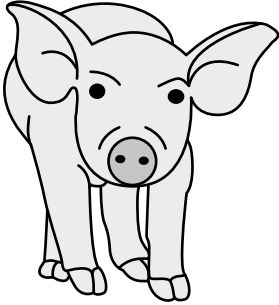
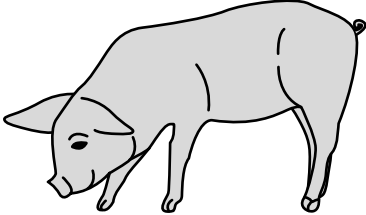
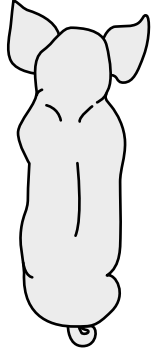
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6. Analogue clock faces (Lessons 32 and 33)



7. Views (Lessons 38)

Mental Mathematics Challenge Cards: Bilingual Version - English / isiXhosa

Each term there will be a set of eight mental mathematics challenge cards. If you make them into cards and collect them over the course of the year, you will have a set of one card per teaching week for a year.

Use of the mental mathematics challenge cards

Once a week learners should do mental mathematics in written form, so that there is some record of your daily mental mathematics activities. You can use the mental mathematics challenge cards for this purpose.

Learners should not use concrete material to work out the answers in mental mathematics. If learners need to, let them use their fingers as a concrete aid during mental mathematics, but make a note of who they are and then spend time with them during remediation to help them with the basic number and operation skills. Mental mathematics skills improve hugely from Grade 1 to Grade 3. In Grade 1 learners might only manage five questions, especially when they have to write the answers, but by Grade 3 learners should manage ten questions with written answers easily.

Maths Challenge Card 1

Ikhadi Lezibalo zomceli-mngeni 1

1. $4 + 3 =$
2. $5 + 4 =$
3. $9 + 2 =$
4. $13 + 1 =$
5. $10 + 3 =$
6. $11 + 2 =$
7. $7 + 7 =$
8. $10 + 5 =$
9. $8 + 5 =$
10. $15 + 0 =$

Maths Challenge Card 2

Ikhadi Lezibalo zomceli-mngeni 2

1. $10 - 5 =$
2. $9 - 4 =$
3. $13 - 3 =$
4. $15 - 5 =$
5. $12 - 8 =$
6. $14 - 7 =$
7. $12 - 10 =$
8. $15 - 14 =$
9. $11 - 6 =$
10. $15 - 6 =$

Maths Challenge Card 3

What is 2 more than?

Ikhadi Lezibalo zomceli-mngeni 3:

Leliphi inani elikhulu ka-2 ku?

1. 6
2. 12
3. 23
4. 19
5. 25
6. 32
7. 56
8. 49
9. 61
10. 72

Maths Challenge Card 4

What is 10 less than?

Ikhadi Lezibalo zomceli-mngeni 4

Leliphi inani elincinci ngo-10 ku?

1. 12
2. 21
3. 56
4. 44
5. 35
6. 60
7. 48
8. 56
9. 63
10. 75

Maths Challenge Card 1: Answers

Addition number range 0–15

Ikhadi Lezibalo zomceli-mngeni 1: limpendulo

Amanani anokudityaniswa 0–15

1. 7
2. 9
3. 11
4. 14
5. 13
6. 13
7. 14
8. 15
9. 13
10. 15

Maths Challenge Card 2: Answers

Subtraction number range 0–15

Ikhadi Lezibalo zomceli-mngeni 2: limpendulo

Amanani okunciphisa 0–15

1. 5
2. 5
3. 10
4. 10
5. 4
6. 7
7. 2
8. 1
9. 5
10. 9

Maths Challenge Card 3: Answers

I Ikhadi Lezibalo zomceli-mngeni 3: limpendulo

1. 8
2. 14
3. 25
4. 21
5. 27
6. 34
7. 58
8. 51
9. 63
10. 74

Maths Challenge Card 4: Answers

I Ikhadi Lezibalo zomceli-mngeni 4: limpendulo

1. 2
2. 11
3. 46
4. 34
5. 25
6. 50
7. 38
8. 46
9. 53
10. 65

Maths Challenge Card 5

What is 5 more than?

Khadi ra ntlhotlho wa Tihlayo 5

Leliphi inani elikhulu nge-5 kunala?

1. 0
2. 5
3. 10
4. 7
5. 11
6. 12
7. 8
8. 18
9. 13
10. 20

Maths Challenge Card 6

What is 4 less than?

Ikhadi Lezibalo zomceli-mngeni 6

Leliphi inani elincinci nge-4 ku?

1. 6
2. 10
3. 8
4. 9
5. 11
6. 15
7. 20
8. 16
9. 21
10. 24

Maths Challenge Card 7

What is 3 more than?

Ikhadi Lezibalo zomceli-mngeni 7

Leliphi inani elikhulu nge-3 kunala

1. 3
2. 6
3. 8
4. 11
5. 15
6. 21
7. 16
8. 20
9. 0
10. 19

Maths Challenge Card 8

Which is less?

Ikhadi Lezibalo zomceli-mngeni 8

Yeyiphi encinane?

1. 2 or / kumbe 4?
2. 6 or / kumbe 16?
3. 21 or / kumbe 12?
4. 19 or / kumbe 18?
5. 5 or / kumbe 36?
6. 40 or / kumbe 44?
7. 78 or / kumbe 68?
8. 80 or / kumbe 81?
9. 10 or / kumbe 100?
10. 35 or / kumbe 53?

Maths Challenge Card 5: Answers

**Ikhadi Lezibalo zomceli-mngeni 5:
limpendulo**

1. 5
2. 10
3. 15
4. 12
5. 16
6. 17
7. 13
8. 23
9. 18
10. 25

Maths Challenge Card 6: Answers

**Ikhadi Lezibalo zomceli-mngeni 6:
limpendulo**

1. 2
2. 6
3. 4
4. 5
5. 7
6. 11
7. 16
8. 12
9. 17
10. 20

Maths Challenge Card 7: Answers

**Ikhadi Lezibalo zomceli-mngeni 7:
limpendulo**

1. 6
2. 9
3. 11
4. 14
5. 18
6. 24
7. 19
8. 23
9. 3
10. 22

Maths Challenge Card 8: Answers

**Ikhadi Lezibalo zomceli-mngeni 8:
limpendulo**

1. 2
2. 6
3. 12
4. 18
5. 5
6. 40
7. 68
8. 80
9. 10
10. 35

Enrichment Activity Cards: English version

Each term a set of new enrichment cards will be provided. You should retain this set, as they will not be reproduced each term.

Use of the enrichment activity cards

Optional as required.

These cards include activities that you can use for enrichment opportunities for learners who have completed the lesson activities ahead of the rest of the class. Learners should work on these cards independently or with their peers who have also completed the classwork. You may need to explain some of the activities to the learners who use them. You should remind them to ask you questions about any of the enrichment activities that they are doing, so that you can guide them as necessary.

You should photocopy the enrichment cards, paste them onto cardboard and laminate them (if possible), so that they can be used as a resource, not only this year but in the future as well.

Put the laminated cardboard cards into a box in a set place in your classroom, so that learners know where to find them. These cards are for all learners and do not have to be used in a particular order. Learners should keep a record of the cards that they have done, so that they continue to choose a new card each time they go to the box. Learners must be taught to replace the cards in numeric order in the box, so that everyone who looks for cards can easily find the one they want to use.

Enrichment Activity 3.1

Who am I?

I am less than 20, but more than 15. My neighbour is 1 less than 18 and one more than me.

I am less than 16. If you add me three times, I become 45.

Enrichment Activity 3.2

Who has the most money?

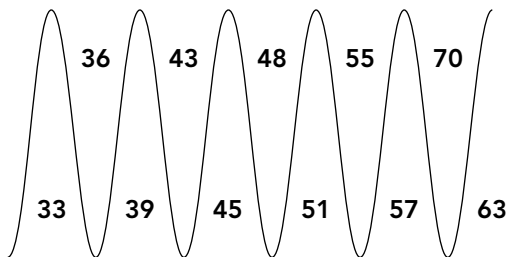
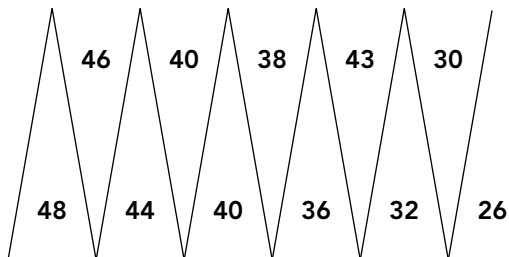
- Busi has: two 10c coins, three 50c coins and one R2 coin.
- Pete has: two R1 coins, six 5c coins and two 20c coins.
- Nicole has: seven 10c coins, five 20c coins and eight 5c coins.

Who has the most money?

Enrichment Activity 3.3

Spot the mistake

Use your pencil to colour the numbers and shape which are wrong.



Enrichment Activity 3.4

Find the numbers

Find and colour all the pairs of blocks where two numbers that are next to, or underneath one another, will give you 30.

15	15	12	17
4	14	16	12
5	10	21	9
25	30	14	18
8	0	11	12

Enrichment Activity 3.1: Answers

Who am I?

I am less than 20, but more than 15. My neighbour is 1 less than 18 and one more than me.

16

I am less than 16. If you add me three times, I become 45.

15

Enrichment Activity 3.2: Answers

Who has the most money?

- Busi has: two 10c coins, three 50c coins and one R2 coin.
- Pete has: two R1 coins, six 5c coins and two 20c coins.
- Nicole has: seven 10c coins, five 20c coins and eight 5c coins.

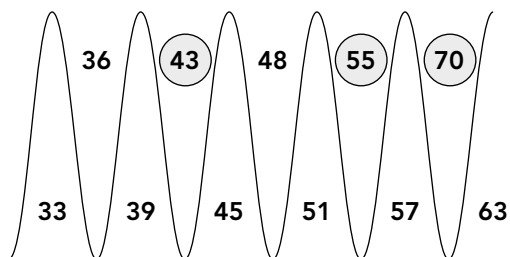
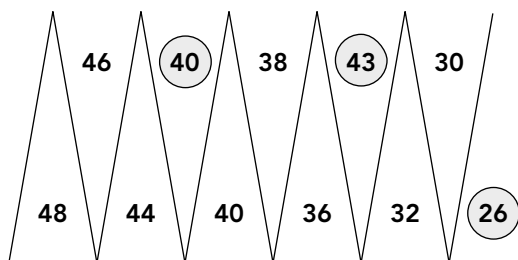
Who has the most money?

Busi has the most money!

Enrichment Activity 3.3: Answers

Spot the mistake

Use your pencil to colour the numbers and shape which are wrong.



Enrichment Activity 3.4: Answers

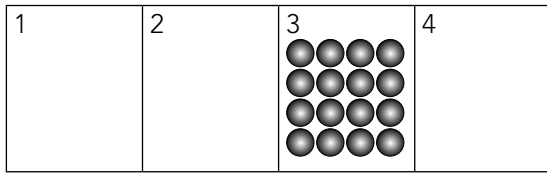
Find the numbers

Find and colour all the pairs of blocks where two numbers that are next to, or underneath one another, will give you 30.

15	15	12	17
4	14	16	12
5	10	21	9
25	30	14	18
8	0	11	12

Enrichment Activity 3.5

Brain teaser



Box 3 has 16 marbles.

Box 1 has half of that.

Box 4 has twice as many as box 1.

Box 2 has half of the amount of eggs than box 4.

How many marbles are there in box 1 and 2 altogether?

Enrichment Activity 3.6

Secret message

Crack the code using the answer box.

a	e	h	l	m	i	o	t	s	v
24	25	26	34	35	36	44	45	46	50

1. $18 + 18 = \underline{\quad}$
2. $17 + 17 = \underline{\quad}$
3. $22 + 22 = \underline{\quad}$
4. $25 + 25 = \underline{\quad}$
5. $12 + 13 = \underline{\quad}$
6. $17 + 18 = \underline{\quad}$
7. $12 + 12 = \underline{\quad}$
8. $22 + 23 = \underline{\quad}$
9. $13 + 13 = \underline{\quad}$
10. $23 + 23 = \underline{\quad}$

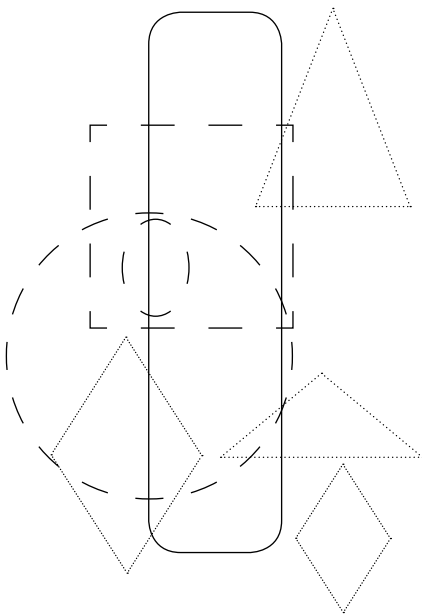
Enrichment Activity 3.7

Shapes

triangles – blue

squares – red

circles – yellow



Enrichment Activity 3.8

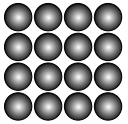
Find the numbers

Find and colour all the pairs of blocks where two numbers that are next to, or underneath one another, will give you 30.

26	19	4	7
3	11	18	23
27	4	26	9
13	15	29	1
17	15	11	12

Enrichment Activity 3.5: Answers

Brain teaser

1	2	3	4
8	8		16

Box 3 has 16 marbles.

Box 1 has half of that.

Box 4 has twice as many as box 1.

Box 2 has half of the amount of eggs than box 4.

How many marbles are there in box 1 and 2 altogether?

18

Enrichment Activity 3.6: Answers

Secret message

Crack the code using the answer box.

a	e	h	l	m	i	o	t	s	v
24	25	26	34	35	36	44	45	46	50

1. $18 + 18 = 36$
2. $17 + 17 = 34$
3. $22 + 22 = 44$
4. $25 + 25 = 50$
5. $12 + 13 = 25$
6. $17 + 18 = 35$
7. $12 + 12 = 24$
8. $22 + 23 = 45$
9. $13 + 13 = 26$
10. $23 + 23 = 46$

I love maths

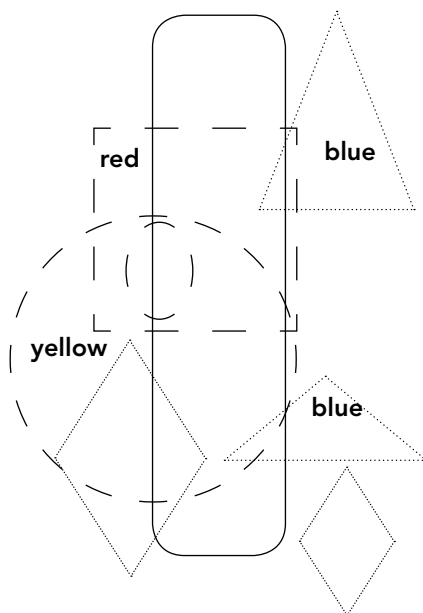
Enrichment Activity 3.7: Answers

Shapes

triangles – blue

squares – red

circles – yellow



Enrichment Activity 3.8: Answers

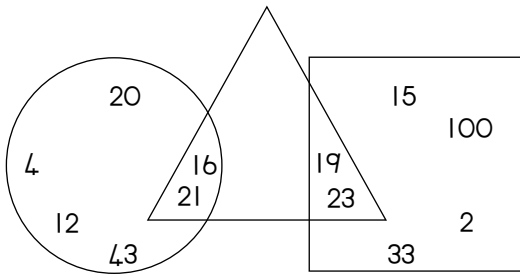
Find the numbers

Find and colour all the pairs of blocks where two numbers that are next to, or underneath one another, will give you 30.

26	19	4	7
3	11	18	23
27	4	26	9
13	15	29	1
17	15	11	12

Enrichment Activity 3.9

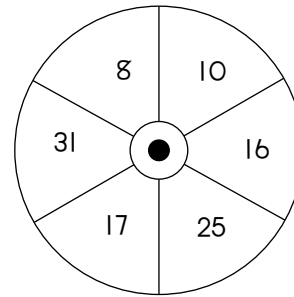
What is my number?



1. This number is in the circle.
It is double 6. _____
2. This number is in the square.
If you halve it, it becomes 50. _____
3. This number is in the triangle.
It is an even number and is 2 less than 18.

Enrichment Activity 3.10

Playing darts



1. What is the highest score using 2 darts?

2. Ben's score is 30.
Which three numbers did he get?
_____, _____, _____.
3. Siphó's score is 16. Two darts hit the
same number. Which number did he get?

Enrichment Activity 3.11

How many squares?

A				
B				
C				
D				

How many squares are there in:

Line A? _____

Line C + D? _____

Half of line B? _____

Add line C and half of line B.

Enrichment Activity 3.12

Number 12

_____ x 1 = 12

_____ x 2 = 12

_____ x 3 = 12

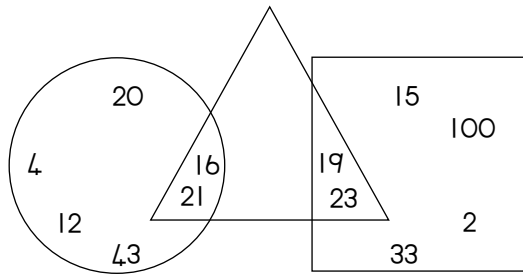
_____ x 4 = 12

_____ x 6 = 12

_____ x 12 = 12

Enrichment Activity 3.9: Answers

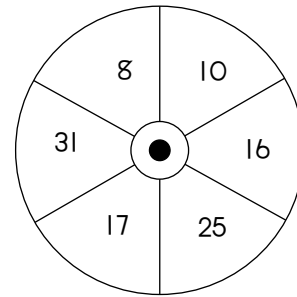
What is my number?



1. This number is in the circle.
It is double 6. **12**
2. This number is in the square.
If you halve it, it becomes 50. **100**
3. This number is in the triangle.
It is an even number and is 2 less than 18.
16

Enrichment Activity 3.10: Answers

Playing darts



1. What is the highest score using 2 darts?
62
2. Ben's score is 30.
Which three numbers did he get?
10, 10, 10.
3. Siphon's score is 16. Two darts hit the
same number. Which number did he get?
8

Enrichment Activity 3.11: Answers

How many squares?

A				
B				
C				
D				

How many squares are there in:

Line A? **4**

Line C + D? **8**

Half of line B? **2**

Add line C and half of line B.

6

Enrichment Activity 3.12: Answers

Number 12

$$12 \times 1 = 12$$

$$6 \times 2 = 12$$

$$4 \times 3 = 12$$

$$3 \times 4 = 12$$

$$2 \times 6 = 12$$

$$1 \times 12 = 12$$

Enrichment Activity 3.13

Sms your mom



Which symbols do you see if you sms this message to your mom: **I love you.**

Enrichment Activity 3.14

What is the message?



- 9 * ,

* 5 5

Enrichment Activity 3.15

Add



All the numbers in the first row: _____

All the numbers in the second row: _____

All the numbers in the third row: _____

What is the total of the numbers in rows 1 and 2?

Enrichment Activity 3.16

Some more adding



Add all of the numbers in the column starting with 1: _____

Add all of the numbers in the column starting with 2: _____

Add all of the numbers in the column starting with 3: _____

What is the total of the numbers in columns 1 and 3? _____

Enrichment Activity 3.13: Answers

Sms your mom



Which symbols do you see if you sms this message to your mom: **I love you.**

- " + ? 2

) + -

Enrichment Activity 3.14: Answers

What is the message?



- 9 * ,

l c a n

* 5 5

a d d

Enrichment Activity 3.15: Answers

Add



All the numbers in the first row: **6**

All the numbers in the second row: **15**

All the numbers in the third row: **24**

What is the total of the numbers in rows 1 and 2? **21**

Enrichment Activity 3.16: Answers

Some more adding



Add all of the numbers in the column starting with 1: **12**

Add all of the numbers in the column starting with 2: **15**

Add all of the numbers in the column starting with 3: **18**

What is the total of the numbers in columns 1 and 3? **30**

Enrichment Activity 3.17: Answers

Ordinal numbers

In the sentence:

Dad took me to the zoo.

Which is the eighth letter? **m**

In the sentence:

We saw lions and buck.

Which is the thirteenth letter? **d**

In the sentence:

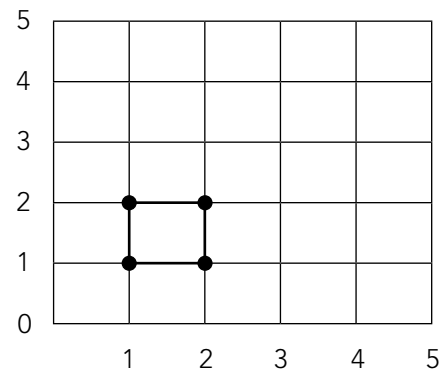
We also saw penguins and ...

write down these letters to find out what other animal we saw: the eighth, the tenth, the second and the seventh letter.

We also saw **apes**.

Enrichment Activity 3.18: Answers

Connect the dots



Make a dot on 1-1 (done for you), 2-2, 2-1 and 1-2. Connect the dots.

What shape do you get?

square

Enrichment Activity 3.19: Answers

What is the number?

I have 4 tens.

What is 3 less units than the tens?

37

I have 1 ten.

What is 5 units more than the tens?

15

I have 8 units.

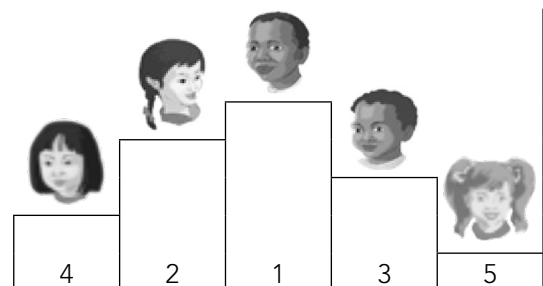
What is 4 tens more than the units?

48

Enrichment Activity 3.20: Answers

Where did I come in the race?

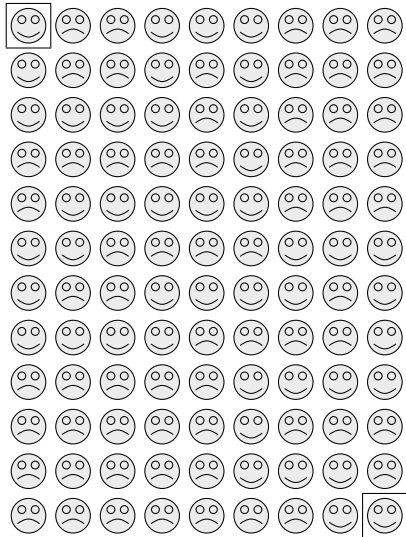
1. Imram came first.
2. Mary came second.
3. John came third.
4. Maryke came fifth.
5. I came **fourth**.



Enrichment Activity 3.21

Find your way

Start at the first face and find a way to the last face by going past only the happy faces. Don't go through any sad faces.



Enrichment Activity 3.22

Where is the number name?

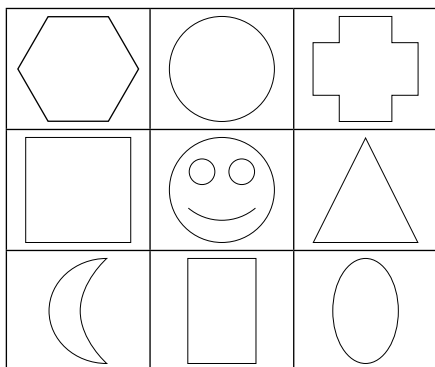
Where is the number name in the letter grid? Colour or circle each word.

b	o	n	e	d	r	e
s	e	c	o	n	d	l
i	x	t	h	r	e	e
x	t	e	n	t	h	v
t	w	e	l	v	e	e
y	o	f	o	u	r	n

- 1 11
- 3 60
- 2nd 2
- 12 10th

Enrichment Activity 3.23

Who are my friends?



Colour the shapes:

- The square red.
- The cross orange.
- The oval blue.
- The triangle pink.
- The hexagon green.

What is the shape of the moon called?

Colour it yellow.

Enrichment Activity 3.24

Find the shape names in the letter grid. Colour or circle each word.

t	r	i	a	n	g	l	e	m	a
r	e	d	r	i	e	h	o	e	k
i	c	i	r	c	l	e	s	u	m
a	t	x	h	e	x	a	g	o	n
n	a	s	f	r	t	h	i	v	t
l	n	s	q	p	m	n	b	a	h
g	g	o	c	i	r	c	e	l	r
e	l	r	s	q	u	a	r	e	e
e	e	c	r	e	s	c	e	n	t

- triangle rectangle
- circle oval
- hexagon square
- crescent cross

Enrichment Activity 3.25

Complete the Sudoku to make 10s





4	2		
		2	4
3	1		
		1	3

Enrichment Activity 3.26

Money





Order the coins from the coins with the most value to the coins with the least value.

Only write the numbers.

1. 	2. 	3. 	4. 

Now order from the coins with the least value to the coins with the most value.

Only write the numbers.

1. 	2. 	3. 	4. 

Enrichment Activity 3.27

What can I buy?

You have R2, 00.

Can you buy three cupcakes?



You have R5, 00.

Can you buy three balls?



Enrichment Activity 3.28

Complete the Sudoku

	2	3	
1			4
2			3
	1	4	

Enrichment Activity 3.25: Answers

Complete the Sudoku to make 10s

4	2	3	1
1	3	2	4
3	1	4	2
2	4	1	3





Enrichment Activity 3.26: Answers

Money

Order the coins from the coins with the most value to the coins with the least value.
Only write the numbers.

1. 	2. 	3. 	4. 
2	3	4	1

Now order from the coins with the least value to the coins with the most value.
Only write the numbers.

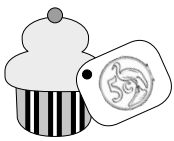
1. 	2. 	3. 	4. 
3	2	1	4

Enrichment Activity 3.27: Answers

What can I buy?

You have R2, 00.

Can you buy three cupcakes?



YES

You have R5, 00.

Can you buy three balls?



NO

Enrichment Activity 3.28: Answers

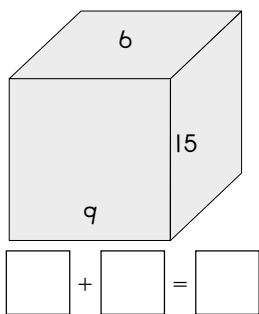
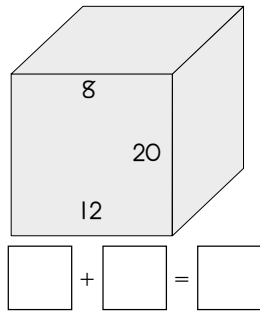
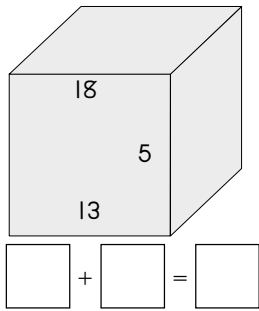
Complete the Sudoku

4	2	3	1
1	2	2	4
2	4	1	3
3	1	4	2

Enrichment Activity 3.29

Jumbled sums

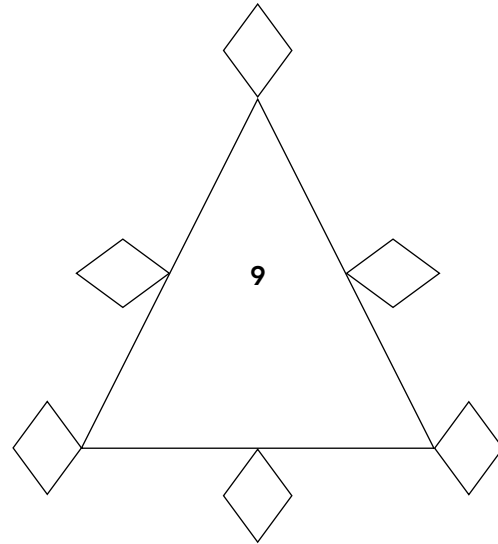
Use the numbers in the boxes to make a sum.



Enrichment Activity 3.30

Six numbers

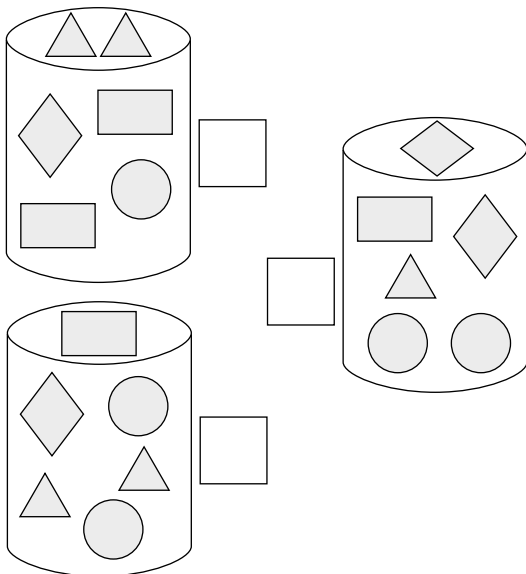
Place the numbers 1–6 in the diamonds so that each side of the triangle adds to the total inside the triangle.



Enrichment Activity 3.31

Value

What is the value of each cylinder if a rectangle is 4, a circle is 7, a triangle is 5 and a diamond is 10? Write the answer in the box.



Enrichment Activity 3.32

Colour to show the answer

Colour the numbers that will add up to the first number in the row of blocks.

17	3	5	2	9	7	8	0
----	---	---	---	---	---	---	---

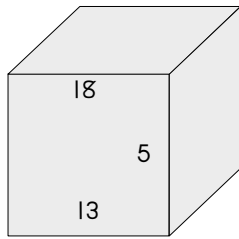
22	8	6	10	4	3	5	2
----	---	---	----	---	---	---	---

31	1	9	7	3	10	5	1
----	---	---	---	---	----	---	---

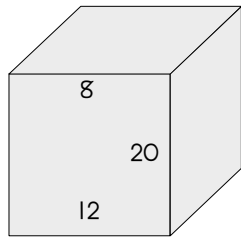
Enrichment Activity 3.29: Answers

Jumbled sums

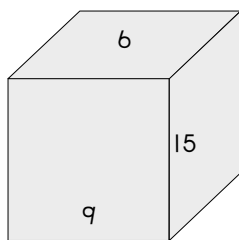
Use the numbers in the boxes to make a sum.



$$\boxed{13} + \boxed{5} = \boxed{18}$$



$$\boxed{12} + \boxed{8} = \boxed{20}$$

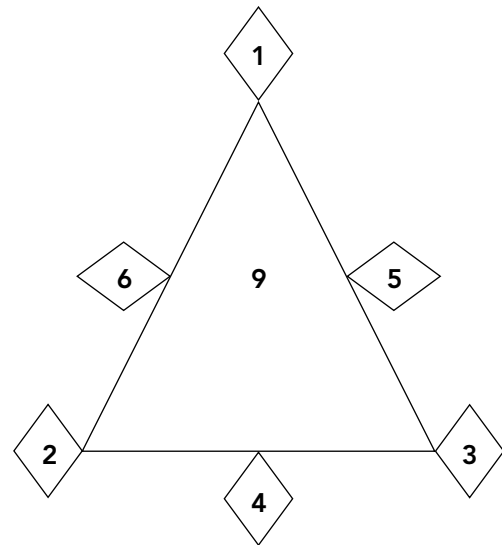


$$\boxed{9} + \boxed{6} = \boxed{15}$$

Enrichment Activity 3.30: Answers

Six numbers

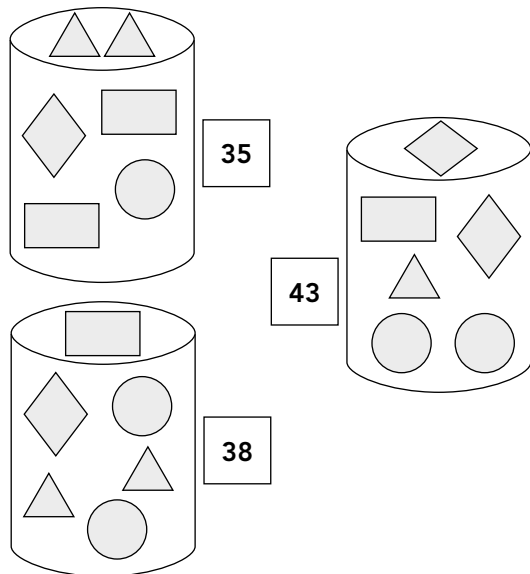
Place the numbers 1–6 in the diamonds so that each side of the triangle adds to the total inside the triangle.



Enrichment Activity 3.31: Answers

Value

What is the value of each cylinder if a rectangle is 4, a circle is 7, a triangle is 5 and a diamond is 10? Write the answer in the box.



Enrichment Activity 3.32: Answers

Colour to show the answer

Colour the numbers that will add up to the first number in the row of blocks.

17	3	5	2	9	7	8	0
17	3	5	2	9	7	8	0

22	8	6	10	4	3	5	2
22	8	6	10	4	3	5	2

31	1	9	7	3	10	5	1
----	---	---	---	---	----	---	---

Enrichment Activity Cards: isiXhosa version

Each term a set of new enrichment cards will be provided. You should retain this set, as they will not be reproduced each term.

Use of the enrichment activity cards

Optional as required.

These cards include activities that you can use for enrichment opportunities for learners who have completed the lesson activities ahead of the rest of the class. Learners should work on these cards independently or with their peers who have also completed the classwork. You may need to explain some of the activities to the learners who use them. You should remind them to ask you questions about any of the enrichment activities that they are doing, so that you can guide them as necessary.

You should photocopy the enrichment cards, paste them onto cardboard and laminate them (if possible), so that they can be used as a resource, not only this year but in the future as well.

Put the laminated cardboard cards into a box in a set place in your classroom, so that learners know where to find them. These cards are for all learners and do not have to be used in a particular order. Learners should keep a record of the cards that they have done, so that they continue to choose a new card each time they go to the box. Learners must be taught to replace the cards in numeric order in the box, so that everyone who looks for cards can easily find the one they want to use.

Imisebenzi yophuculo 3.1

Ndingubani?

I am less than 20, but more than 15. My neighbour is 1 less than 18 and one more than me.

I am less than 16. If you add me three times, I become 45.

Mfumiso wa Nghingiriko 3.2

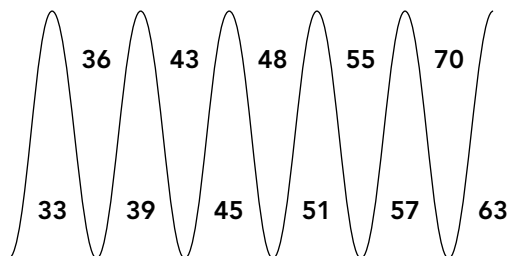
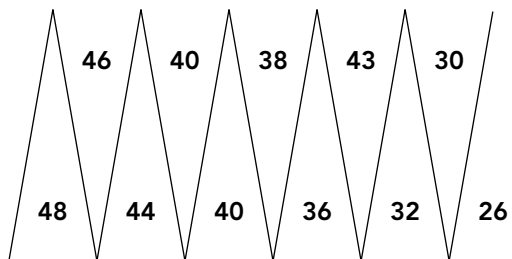
I mani a nga na mali yo tala

- Busi u na: mbirhi 10c swingwece, nharhu 50c swingwece na n'we R2 swingwece.
- Pete u na: mbirhi R1 swingwece, tsevu 5c swingwece na mbirhi 20c swingwece.
- Nicole u na: nkombo 10c swingwece, ntlhanu 20c swingwece na nhungu 5c swingwece.

I mani a nga na mali yo tala?

Mfumiso wa Nghingiriko 3.3

Lava xihoxo



Mfumiso wa Nghingiriko 3.4

Kuma tinomboro

Kuma u khalara tibuloko leti fambaka hi timbirhi-mbirhi laha tinomboro timbirhi ti nga ekusuhi, kumbe hansi ka yin'wana, ti ku nyika 30.

15	15	12	17
4	14	16	12
5	10	21	9
25	30	14	18
8	0	11	12

Mfumiso wa Nghingirik 3.1 Tinhlamulo: limpendulo

Hi mina mani?

Ndzi le hansi ka 20, kambe ku tlula 15. Muakelani wa mina u 1 hunguta 18 na n'we ku tlula mina.

16

Ndzi le hansi ka 16. Loko u ndzi hlanganisa ka nharhu, ndzi hundzuka 45

15

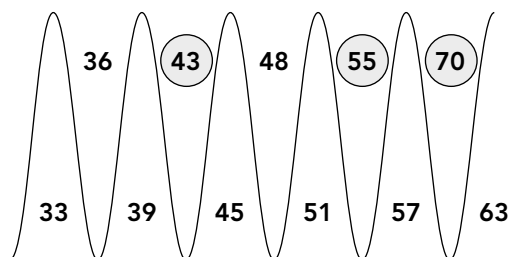
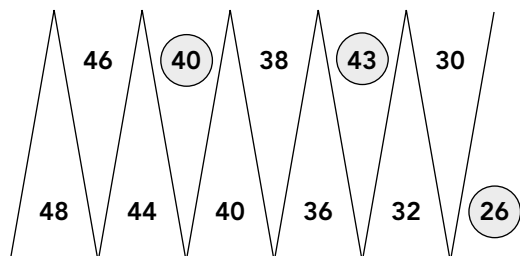
Mfumiso wa Nghingiriko 3.2: limpendulo Tinhlamulo

Imani a nga na mali yo tala?

- Busi u na: mbirhi 10c swingwece, nharhu 50c swingwece na n'we R2 swingwece.
- Pete u na: mbirhi R1 swingwece, tsevu 5c swingwece na mbirhi 20c swingwece.
- Nicole u na: nkombo 10c swingwece, ntlhanu 20c swingwece na nhungu 5c swingwece.

Mfumiso wa Nghingiriko 3.3 Tinhlamulo: limpendulo

Lava xihoxo



so wa Nghingiriko 3.4 Tinhlamulo: limpendulo

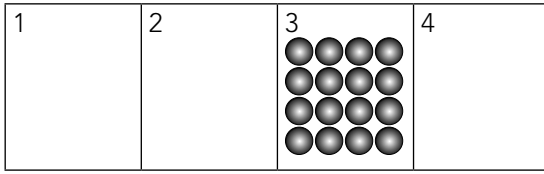
Kuma tinomboro

Kuma u khalara tibuloko leti fambaka hi timbirhi-mbirhi laha tinomboro timbirhi ti nga ekusuhi, kumbe hansi ka yin'wana, ti ku nyika 30.

15	15	12	17
4	14	16	12
5	10	21	9
25	30	14	18
8	0	11	12

Imisebenzi yophuculo 3.5

Isintsompothi ngqondo



Ibhokisi yesi 3 inamabhastile ali 16.
Ibhokisi e1 ine hafu yawo.
Ibhokisi ye 4 ingambini njengebhokisi yoku1.
Ibhokisi ye 2 ine hafu yesixa samaqanda ngaphezu kwebhokisi ye 4.
Mangaphi amabhastile aphaya ebhokisini yoku1 kunye neye 2 zizonke?

Imisebenzi yophuculo 3.6

Umyalezo ofihlakeleyo

Tyhila ikhodi usebenzisa ibhokisi yempendulo..

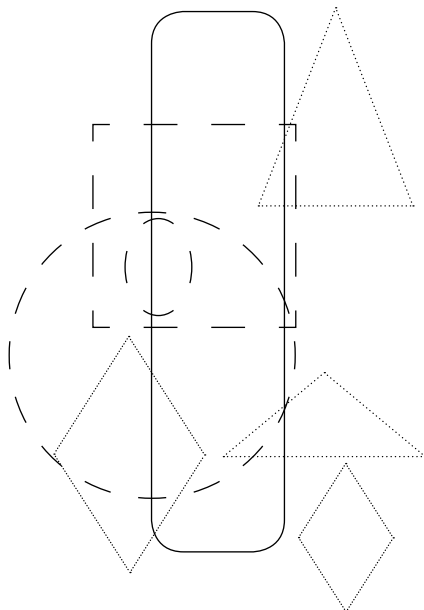
a	e	h	l	m	i	o	t	s	v
24	25	26	34	35	36	44	45	46	50

- 18 + 18 = ___
- 17 + 17 = ___
- 22 + 22 = ___
- 25 + 25 = ___
- 12 + 13 = ___
- 17 + 18 = ___
- 12 + 12 = ___
- 22 + 23 = ___
- 13 + 13 = ___
- 23 + 23 = ___

Imisebenzi yophuculo 3.7

Fumana iimilo ufake umbala

Oonxantathu – abamzuba
Izikwere – ezibomvu
izangqa - ezilubhelu



Imisebenzi yophuculo 3.8

Fumana amanani

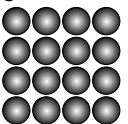
Fumana kwaye ufakele umbala kuzo zonke izibini

Zebhloko apho amanani acaleni linye, okanye angaphantsi kwelinye, likunika u- 30

26	19	4	7
3	11	18	23
27	4	26	9
13	15	29	1
17	15	11	12

Imisebenzi yophuculo 3.5 limpendulo

Isintsompothi sengqondo

1	2	3	4
			
8	8		16

Ibhokisi yesi 3 inamabhastile ali 16. Ibhokisi e1 ine hafu yawo.

Ibhokisi ye 4 ingambini njengebhokisi yoku1.

Ibhokisi ye 2 ine hafu yesixa samaqanda ngaphezu kwebhokisi ? Mangaphi amabhastile aphaya ebhokisini yoku1 kunye neye 2 zizonke

18

Imisebenzi yophuculo 3.6: limpendulo

Umyalezo ofihlakeleyo

Tyhila ikhodi usebenzisa ibhokisi yempendulo

a	e	h	l	m	i	o	t	s	v
24	25	26	34	35	36	44	45	46	50

1. $18 + 18 = \mathbf{36}$
2. $17 + 17 = \mathbf{34}$
3. $22 + 22 = \mathbf{44}$
4. $25 + 25 = \mathbf{50}$
5. $12 + 13 = \mathbf{25}$
6. $17 + 18 = \mathbf{35}$
7. $12 + 12 = \mathbf{24}$
8. $22 + 23 = \mathbf{45}$
9. $13 + 13 = \mathbf{26}$
10. $23 + 23 = \mathbf{46}$

I l o v e m a t h s

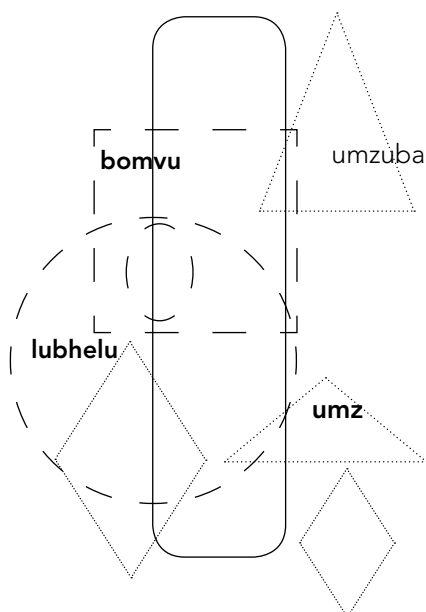
Umsebenzi Wokubakhulisa 3.7: limpendulo

Thola lezi zimo uzifake imibalzi

Oonxantathu – bamzuba

Izikwere – bomvu

izangqa – zilubhelu



Imisebenzi yophuculo 3.8: limpendulo

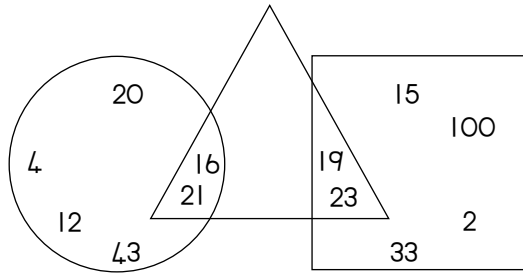
Fumana amanani

Fumana kwaye ufakele umbala kuzo zonke izibini zebhloko apho amanani acaleni linye, okanye angaphantsi kwelinye, likunika u- 30.

26	19	4	7
3	11	18	23
27	4	26	9
13	15	29	1
17	15	11	12

Imisebenzi yophuculo 3.9

Ngubani inani lam?

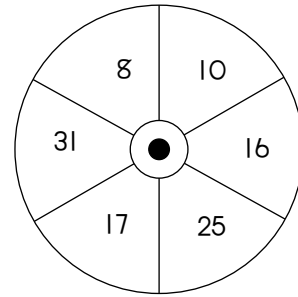


1. Eli nani likwisangqa. Liphinda phinda u 6.

2. Eli nani likwisikwere. Ukuba liyihafu, libangu 50. _____
3. Eli nani likunxantathu. Linani elingaphantsi kwe 18. _____

Imisebenzi yophuculo 3.10

Ukudlala idathi



1. Leliphi inqaku eliphezulu xa usebenzisa iidathi ezi 2? _____
2. Amanqaku kaBen 30. Ngawaphi amanani amathathu aye wawafumana? _____, _____, _____.
3. Amanqaku ka Sipho 16. Idathi ezimbini zibetha inani elinye. Leliphi inani alifumeneyo? _____

Imisebenzi yophuculo 3.11

Zingaphi izikwere?

A				
B				
C				
D				

Zingaphi izikwere eziphaya:

Umgca A? _____

Umgca C + D? _____

Ihafu yomgca u B? _____

Yongeza umgca u C kunye nehafu yomgca ka B. _____

Imisebenzi yophuculo 3.12

Inani 12

$$\text{_____} \times 1 = 12$$

$$\text{_____} \times 2 = 12$$

$$\text{_____} \times 3 = 12$$

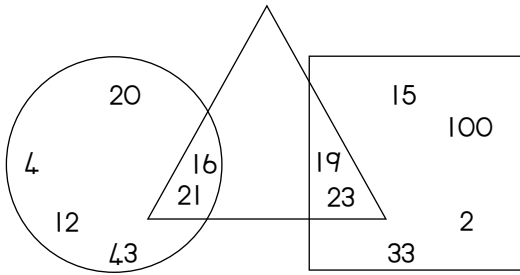
$$\text{_____} \times 4 = 12$$

$$\text{_____} \times 6 = 12$$

$$\text{_____} \times 12 = 12$$

Imisebenzi yophuculo 3.9: limpendulo

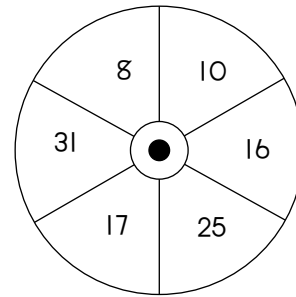
Ngubani inani lam?



1. Eli nani likwisangqa. Liphinda phinda u 6. **_ 12_**
2. Eli nani likwisikwere. Ukuba liyihafu, libangu 50. **_100_**
3. Eli nani likunxantathu. Linani elingaphantsi kwe 18. **_16_**

Umsebenzi Wokubakhulisa 3.10: limpendulo

Umdlalo wemicibosholo



1. Uma kusetshenziswe imicibisholo emi-2 imiphumela ephakeme ithini? **62**
2. Imiphumela kaBen ngama-30. Uthole ziphi izinombolo ezintathu? **10, 10, 10**
3. Imiphumela kaSipho ngama-16. Imicibisholo emibili ingene enombolweni efanayo? **16**

Imisebenzi yophuculo 3.11: limpendulo

Zingaphi izikwere?

A				
B				
C				
D				

Zingaphi izikwere eziphaya:

Umgca A? **_4_**

Umgca C + D? **_8_**

Ihafu yomgca u B? **_2_**

Yongeza umgca u C kunye nehafu yomgca ka B. **_6_**

6

Imisebenzi yophuculo 3.12: limpendulo

limpendulo Inani 12

$$12 \times 1 = 12$$

$$6 \times 2 = 12$$

$$4 \times 3 = 12$$

$$3 \times 4 = 12$$

$$2 \times 6 = 12$$

$$1 \times 12 = 12$$

Imisebenzi yophuculo 3.13

Thumelela umama wakho umyalezo



Zeziphi iisimboli ozibonayo xa uthumelela umama wakho umyalezo othi: **"I love you."**

Imisebenzi yophuculo 3.14

Uthini umyalezo?



- 9 * ,

* 5 5

Imisebenzi yophuculo 3.15

Dibanisa



Wonke amanani kumqolo wokuqala: _____

Wonke amanani kumqolo wesibini: _____

Wonke amanani kumqolo wesithathu: _____

Mangaphi amanqaku ewonke

Imisebenzi yophuculo 3.16

Dibanisa kwakhon



Dibanisa wonke amanani kwikhohlam eqala ngo 1: _____

Dibanisa wonke amanani kwikhohlam eqala ngo2: _____

Dibanisa wonke amanani kwikhohlam eqala ngo 3: _____

Mangaphi amanqaku ewonke kwikhohlam 1 kunye 3?

Imisebenzi yophuculo 3.13 limpendulo

Thumelela umama wakho umyalezo



Zeziphi iisimboli ozibonayo xa uthumelela umama wakho umyalezo othi: "I love you."

- " + ? 2

) + -

Imisebenzi yophuculo 3.14: limpendulo

Uthini umyalezo?



- 9 * ,
 l c a n

* 5 5
 a d d

Imisebenzi yophuculo 3.15: limpendulo

Dibanisa



Wonke amanani kumqolo wokuqala: _6_

Wonke amanani kumqolo wesibini: _15_

Wonke amanani kumqolo wesithathu: _24_

Mangaphi amanqaku ewonke kwimiqolo 1 no 2? _21_

Imisebenzi yophuculo 3.16: limpendulo

Dibanisa kwakhona



Dibanisa wonke amanani kwikholam eqala ngo 1: _12_

Dibanisa wonke amanani kwikholam eqala ngo 2: _15_

Dibanisa wonke amanani kwikholam eqala ngo 3: _18_

Mangaphi amanqaku ewonke kwikholam 1 kunye 3? _30_

Imisebenzi yophuculo 3.17

Amanani olandelelwano

Kwisivakalisi:

Utata undise kwiziko eligcina izilwanyana
Ngomphi unobumba wesibhozo?

Kwisivakalisi:

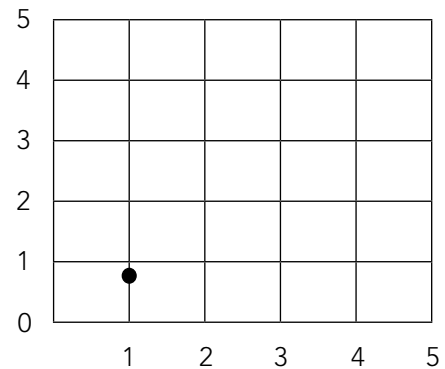
Sibone iingonyama namaqhude
Ngomphi unobumba weshumi elinesithathu?

Kwisivakalisi:

Sibone nee pengwini / iintaka zaselwandle ...
Bhala phantsi aba nobumba ukufumanisa
ukuba zeziphi ezinye izilwanyana esizibonayo:
esesibhozo, eseshumi, sesibini kunye
nesesixhenxe.

Imisebenzi yophuculo 3.18

Dibanisa amachokoza



Yenza ichaphaza ku 1-1 (uyenzelwe), 2-2,
2-1 kunye 1-2. Dibanisa/ Qhakamshela la
machaphaza.

Yeyiphi imilo oyifumanyo?

Imisebenzi yophuculo 3.19

Leliphi inani?

Ndinamashumi ama 4.

Leliphi ilincinane ngokwemivo 3 kunamashumi
?

Ndineshumi eli 1.

Yeyiphi imivo ingaphezulu ngesi 5
kunamashumi?

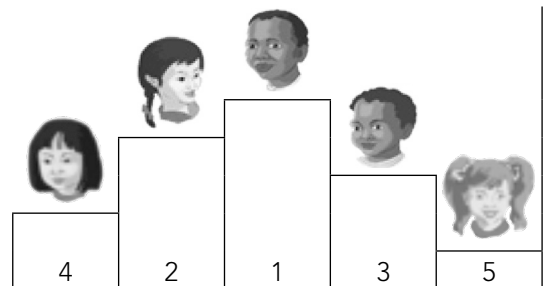
Ndinemivo esi 8.

Amashumi ama 4 angaphezulu kangakanani
kunemivo?

Imisebenzi yophuculo 3.20

Ndiphi mna kolu gqatso?

1. UImram ngowokuqala.
2. UMary ungowesibini.
3. UJohn ungowesithathu.
4. UMaryke ungowesihlanu.
5. Ndingwe _____.



Imisebenzi yophuculo 3.17: Iimpendulo

Amanani olandelelwano

Kwisivakalisi:

Utata undise kwiziko eligcina izilwanyana

Ngomphi unobumba wesibhoz u

Kwisivakalisi:

Sibone iingonyama namaqhude

Ngomphi unobumba weshumi elinesithathu?
b

Kwisivakalisi:

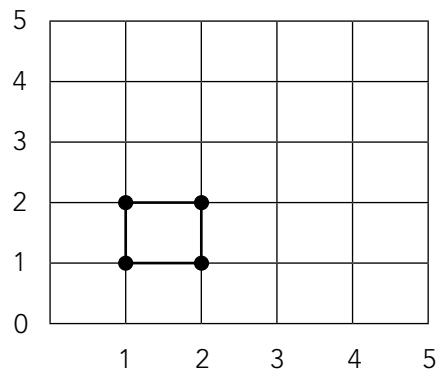
Sibone nee pengwini / iintaka zaselwandle ...

Bhala phantsi aba nobumba ukufumanisa ukuba zeziphi ezinye izilwanyana esizibonayo: esesibhozo, eseshumi, sesibini kunye nesesixhenxe.

Sibone ne apes

Imisebenzi yophuculo 3.18: Iimpendulo

Connect the dots



Yenza ichaphaza ku 1-1 (uyenzelwe), 2-2, 2-1 kunye 1-2. Dibanisa/ Qhakamshela la machaphaza.

Yeyiphi imilo oyifumanayo?

Isikwere

Imisebenzi yophuculo 3.19: Iimpendulo

Ndinamashumi ama 4.

Leliphi ilincinane ngokwemivo 3 kunamashumi ?

37

Ndineshumi eli 1.

Yeyiphi imivo ingaphezulu ngesi 5 kunamashumi?

15

Ndinemivo esi 8.

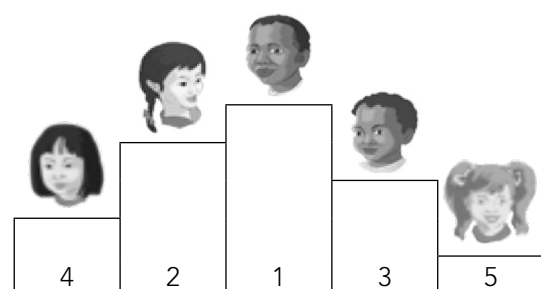
Amashumi ama 4 angaphezulu kangakanani kunemivo?

48

Imisebenzi yophuculo 3.20: Iimpendulo

Ndiphi mna kolu gqatso?

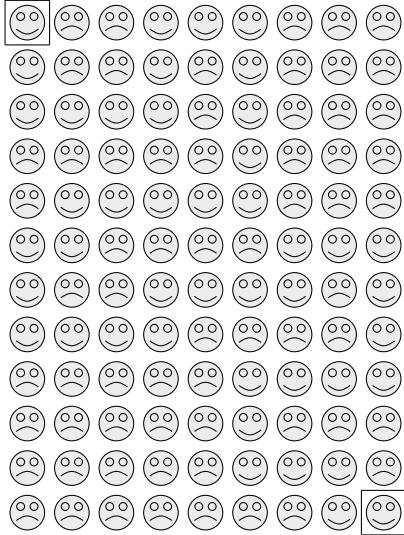
1. UMram ngowokuqala.
2. UMary ungowesibini.
3. UJohn ungowesithathu.
4. UMaryke ungowesihlanu.
5. Ndingowe _____.
6. ndingowesine.



Imisebenzi yophuculo 3.21

Fumana indlela yakho

Qala kugqatso lokuqala ufumane indlela eya kubuso bokugqibela ngokuthi ugqithe ebusweni obonwabileyo. Ungahambi nakobuphina ubuso, hamba kobonwabileyo.



Imisebenzi yophuculo 3.22

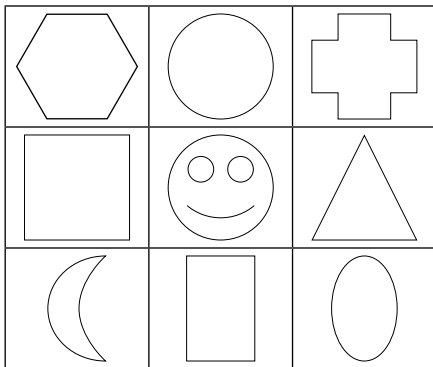
Liphi igama lenani kule gridi yonobumba? Fakela umbala okanye ufake isangqa kwigama ngalinye.

b	o	n	e	d	r	e
s	e	c	o	n	d	l
i	x	t	h	r	e	e
x	t	e	n	t	h	v
t	w	e	l	v	e	e
y	o	f	o	u	r	n

- 1 11
- 3 60
- 2nd 2
- 12 10th

Imisebenzi yophuculo 3.23

Ngoobani otshomi bakho?



- Fakela umbala kwimilo:
- Isikwere sibomvu.
- Umnqamlezo u-oranji.
- Iovali imzuba.
- Unxantathu upinki.
- Unxantandathu (hexagon) iluhlaza.
- Ibizwa ngokuba yintoni imilo yenyanga?
- Yifakele umbala olubhele.

Imisebenzi yophuculo 3.24

Imisebenzi yophuculo 3.24: limpendulo

Fumana amagama eemilo kwigridi yonobumba. Fakela umbala okanye ubiyele ngesangqa kwigama ngalinye.

e	a	e	u	c	v	m	k	l	s	c	i	z
b	u	n	x	a	n	t	a	t	h	u	k	k
u	n	x	a	n	t	a	n	d	a	t	h	u
a	a	b	n	c	v	m	k	l	s	c	r	l
n	w	k	d	i	o	v	a	l	i	i	e	a
d	z	l	e	a	b	c	m	u	l	o	s	l
e	u	m	n	q	a	m	l	e	z	o	e	z
g	c	v	m	k	l	s	c	c	b	c	n	o
x	i	s	a	n	g	q	a	c	v	c	t	a
o	i	s	i	k	w	e	r	e	c	v	i	b

- unxantathu, ebuxande, isangqa, iovali,
- unxantandathu, isikwere, ikhresenti,
- umnqamlezo

Imisebenzi yophuculo 3.25





Gqibezela le Sudoku ukwenza amashumi 10s

4	2		
		2	4
3	1		
		1	3





Imisebenzi yophuculo 3.26

Imali

Beka iingqekembe ngokulandelelana kwazo, ukusuka kwezinxabiso elikhulu ukuya kwelincinane. Bhala amanani kuphela.

1. 	2. 	3. 	4. 

LKe ngoku zicwangcise ukusuka kwenexabiso elincinane ukuya kwelikhulu. Bhala amanani kuphela.

1. 	2. 	3. 	4. 

Imisebenzi yophuculo 3.27

Ndingathenga ntoni?

Unama R2, 00. Ungazithenga ikeyiki ezintathu



Unama R5, 00. Ungazithenga ibhola ezintathu?



Imisebenzi yophuculo 3.28

Gqibezela i- Sudoku

	2	3	
1			4
2			3
	1	4	

Imisebenzi yophuculo 3.25: Iimpendulo





Gqibezela le Sudoku ukwenza amashumi 10s

4	2	3	1
1	3	2	4
3	1	4	2
2	4	1	3





Imisebenzi yophuculo 3.26: Iimpendulo

Imali

Beka iingqekembe ngokulandelelana kwazo, ukusuka kwezinxabiso elikhulu ukuya kwelincinane. Bhala amanani kuphela.

1. 	2. 	3. 	4. 
2	3	4	1

Ke ngoku zicwangcise ukusuka kwenexabiso elincinane ukuya kwelikhulu. Bhala amanani kuphela.

1. 	2. 	3. 	4. 
3	2	1	4

Imisebenzi yophuculo 3.27: Iimpendulo

Ndingathenga ntoni?

Unama R2, 00. Ungazithenga ikeyiki ezintathu?



Unama R5, 00. Ungazithenga ibhola ezintathu?



Imisebenzi yophuculo 3.28: Iimpendulo

Gqibezela le Sudoku ukwenza amashumi 10s

4	2	3	1
1	2	2	4
2	4	1	3
3	1	4	2

Imisebenzi yophuculo 3.29

Izibalo ezixutyiweyo

Sebenzisa amanani akwiibhokisi ukwenza izibalo

Box 1: Top face 18, front face 5, bottom face 13. Equation: $\square + \square = \square$

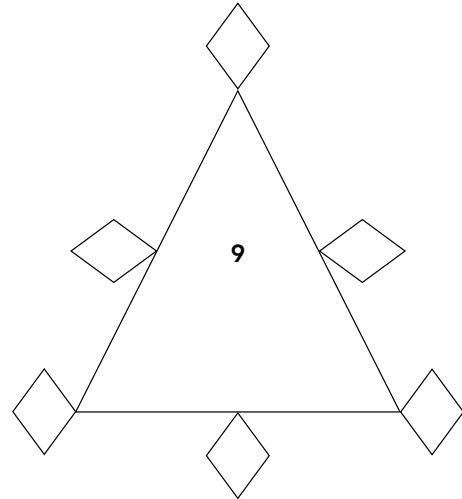
Box 2: Top face 8, front face 20, bottom face 12. Equation: $\square + \square = \square$

Box 3: Top face 6, front face 15, bottom face 9. Equation: $\square + \square = \square$

Imisebenzi yophuculo 3.30

Amanani amathandathu

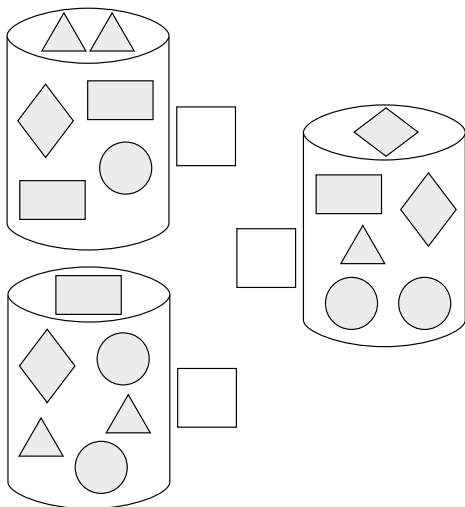
Beka amanani u1–6 kwidayimani ukwenzela ukuba icala ngalinye likanxantathu longeze kunxantathu ongaphakathi.



Imisebenzi yophuculo 3.31

Ixabiso

Lingaba liyintoni ixabiso lesilinda nganye ukuba iimilo ebuxande zi 4, izangqa zi 3, unxantathu om1 kunye needayimani ezi 10? Bhala impendulo kwibhokisi.



Imisebenzi yophuculo 3.32

Faka umbala ukubonakalisa impendulo

Fakela umbala kumanani ayakuthi xa edityaniswa enze inani lokuqala kumqolo webhloko.

17	3	5	2	9	7	8	0
----	---	---	---	---	---	---	---

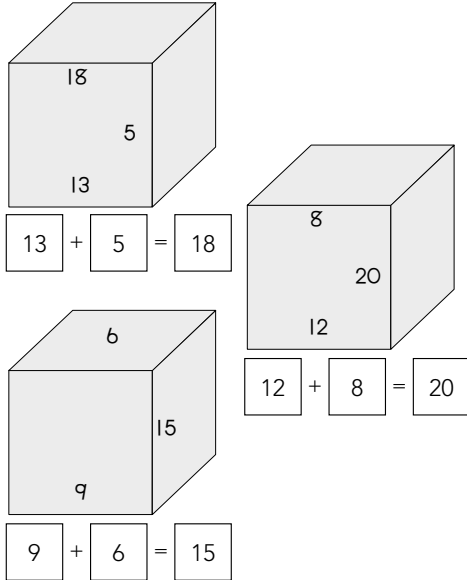
22	8	6	10	4	3	5	2
----	---	---	----	---	---	---	---

31	1	9	7	3	10	5	1
----	---	---	---	---	----	---	---

Imisebenzi yophuculo 3.29: Iimpendulo

Izibalo ezixutyiweyo

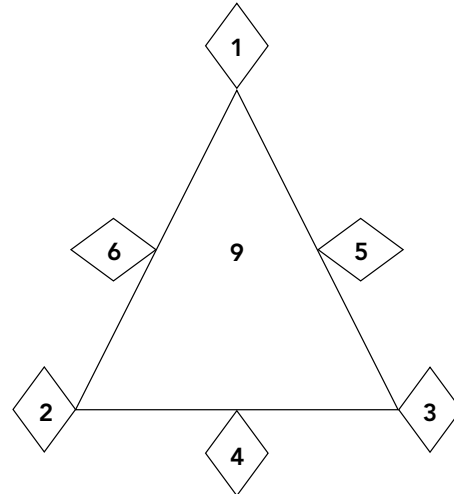
Sebenzisa amanani akwiibhokisi ukwenza iziba.



Imisebenzi yophuculo 3.30: Iimpendulo

Amanani amathandathu

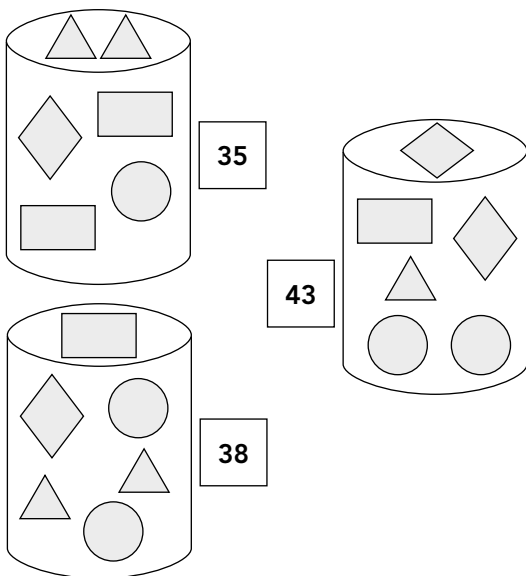
Beka amanani u1–6 kwidayimani ukwenzela ukuba icala ngalinye likanxantathu longeze kunxantathu



Imisebenzi yophuculo 3.31: Iimpendulo

Ixabiso

Lingaba liyintoni ixabiso lesilinda nganye ukuba iimilo ebuxande zi 4, izangqa zi 3, unxantathu om1 kunye needayimani ezi 10? Bhala impendulo kwibhokisi.



Imisebenzi yophuculo 3.32: Iimpendulo

Faka umbala ukubonakalisa

Fakela umbala kumanani ayakuthi xa edityaniswa enze inani lokuqala kumqolo webhloko.

17	3	5	2	9	7	8	0
17	3	5	2	9	7	8	0

22	8	6	10	4	3	5	2
22	8	6	10	4	3	5	2

31	1	9	7	3	10	5	1
----	---	---	---	---	----	---	---