



GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA

**GAUTENG DEPARTMENT OF EDUCATION
PROVINCIAL EXAMINATION
NOVEMBER 2016
GRADE 3**

MATHEMATICS

TEACHER INSTRUCTION

5 pages

GAUTENG DEPARTMENT OF EDUCATION**PROVINCIAL EXAMINATION****MATHEMATICS****TEACHER INSTRUCTION****Activity 2: Oral**

- Rounding-off

Activity 2 - Oral

Number, operations and relationships: Rounding-off

Use a number line to round-off, round-off to the nearest 10 and 100 up

Level		Criteria
7	80 - 100%	Able to round-off numbers to the nearest 10 and 100 in and beyond the number range
6	70 - 79%	Able to round-off numbers to the nearest 10 and 100 with/without the use of a number line up to 1 000.
5	60 - 69%	Able to identify positions of numbers on a number line and decide how to round up or down without assistance.
4	50 - 59%	Able to identify positions of numbers on a number line and decide how to round up or down but needs assistance.
3	40 - 49%	Able to identify positions of numbers on a number line and decide how to round up or down but needs a lot of assistance.
2	30 - 39%	Able to use a number line to identify position of numbers
1	0 - 29%	Unable to round-off numbers.

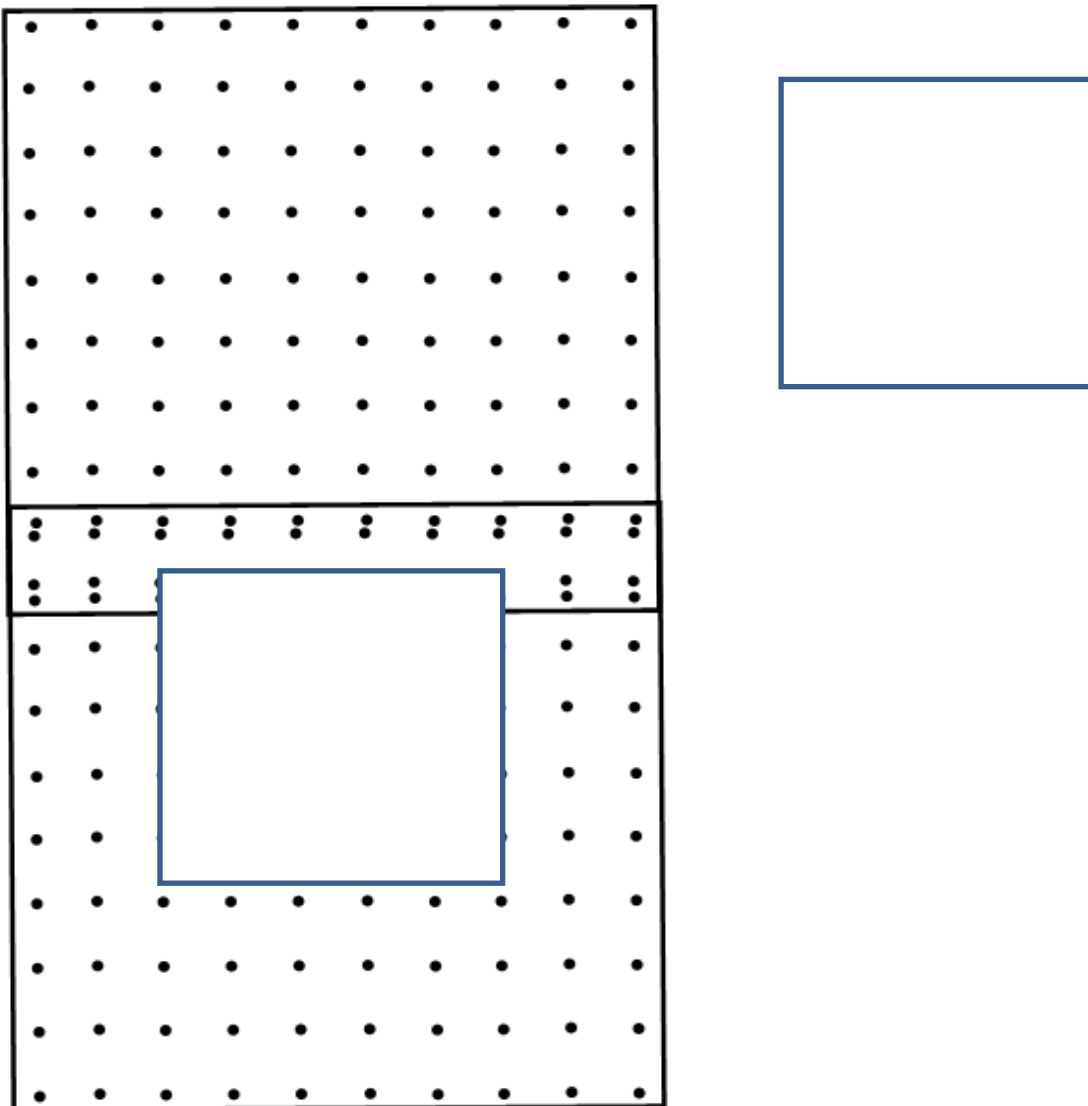
Activity 3: Area

Resources: coloured tiles, different rectangular shapes, grid paper, pair of scissors

Instruction

- Take a grid paper;
- Measure the shape on the grid;
- Use coloured tiles to cover the size of the surface inside of each shape;
- Record the surface size of each shape.

Example



The interior surface of a region is called the area.

Surface area = width = 5 blocks X height = 5 blocks

1 block = 1 cm

That means that the width is 5 cm and height is 5 cm. ∴ Area = 25 **cm²**

Activity 3		
Measurement: Area		
Use a grid page for investigations.		
Levels		
7	80 - 100%	Able to record accurately the area of at least 5 different-sized rectangulars
6	70 - 79%	Able to record accurately the area of at least 4 different-sized rectangulars
5	60 - 69%	Able to record accurately the area of at least 3 different-sized rectangular
4	50 - 59%	Able to record accurately the area of at least 2 different-sized rectangular
3	40 - 49%	Able to record accurately the area of at least 1 rectangular
2	30 - 39%	????
1	0 - 29%	Unable to associate the width and height of one shape.

NOTES FOR THE TEACHER

The interior surface of a region is called the area.

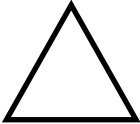
Learners need to first understand the attributes of 'area' before measuring.

Expose yourself and your learners to a variety of practical experiences with area before you introduce and use the formula to calculate the area of a region.

The units to measure area are the same with the linear order but the total size of the surface is in m^2 , The formula to calculate the area of a quadrilateral e.g. rectangle, square is $A = \text{width} \times \text{height} = \text{cm}^2$ OR m^2

For you the teacher only

Formula to calculate area of a triangle is

A of  = $\frac{1}{2}$ base x h

and;

That of a circle is

Circumference = Pi (3.14) x Diameter (C=PiD)

Diameter = 2 x the Radius (D=2R)

Area = Pi x the radius squared ($A=pr^2$) or ($A=\pi r^2$)