

LESSON PLAN: ROUNDING OFF

Subject	Mathematics
Content Area	Numbers, operations and relationships
Topic	Rounding off
Concept	Rounding off to the nearest ten
Educator	Sharon Morgan
School	Irene Primary School
Grade	3

Dear Teacher

I hope that the following lesson description will help to improve your teaching strategy in your classroom. It was particularly designed with you the teacher in mind. The methods used are fun, easy and cost effective. I hope you will find it useful and apply the methodology with a positive and enthusiastic approach.

Before we can begin any lesson we must understand the following:

WHAT IS MATHEMATICS?

Mathematics is a language that makes use of symbols and notations for describing numerical, geometric and graphical relationships. It is a human activity that involves observing, representing and investigating patterns and qualitative relationships in physical and social phenomena and between mathematical objects themselves. It helps to develop mental processes that enhance logical and critical thinking, accuracy and problem-solving that will contribute to decision-making. (quoted from the CAPS document)

Every Mathematics lesson should be **hour 24 minutes per day for Grades 1 to 3.**

SPECIFIC SKILLS

To develop essential mathematical skills the learner should:

- develop the correct use of the language of Mathematics;
- develop number vocabulary, number concept and calculation and application skills;
- learn to listen, communicate, think, reason logically and apply the mathematical knowledge gained;
- learn to investigate, analyse, represent and interpret information (quoted from the CAPS document)

WEIGHTING OF CONTENT AREAS IN FOUNDATION PHASE

Weighting of Content Area				Time
	Grade 1	Grade 2	Grade 3	Time per week
Numbers, Operations and Relationships*	65%	60%	58%	120 minutes
Patterns, Functions and Algebra	10%	10%	10%	80 minutes
Space and Shape (Geometry)	11%	13%	13%	80 minutes
Measurement	9%	12%	14%	80 minutes
Data Handling (Statistics)	5%	5%	5%	60 minutes

Note: This lesson plan is only part of an entire daily Mathematics lesson.

You should include as part of this lesson plan:

- Counting
- Mental Mathematics
- Consolidation of concepts
- Problem Solving
- Group work
- Independent Activities

Content Area	Topic	Concept and skills for the year Grade 1	Concept and skills for the year Grade 2	Concept and skills for the year Grade 3
Problem solving Techniques				Rounding off in tens
Apparatus	Pictures of houses An umbrella Number on cards			
Definition /explanations	Rounding off Rounding off is the most familiar form of estimation. If a learner is a good estimator his or her ability to round off should be flexible and well understood. Before learners can use rounding off as a technique when adding or subtracting they need to practise the technique first.			

Rounding means reducing the digits in a number while trying to keep its value similar. *The result is less accurate, but easier to use.*

Learners are expected to use the following techniques when doing context free calculations:

- Building up or breaking down numbers
- Doubling and halving
- Number lines
- Rounding off in tens

Allow learners to choose the technique most comfortable for them. However, if learners are using techniques that are not efficient they need to be guided to use more efficient methods.

Teaching Method

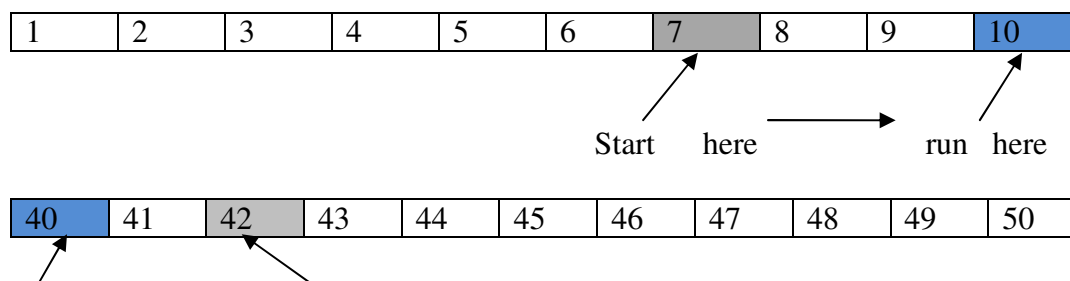
Learners need to understand that:

35 is halfway between 30 and 40. We say that the nearest 10 to 35 is 40 because we round up when the number is halfway between two tens.

Start with a story. We are going to work with houses today and it is very strange that the houses that have multiples of ten numbers on them are always unlocked. So if you walking along and come across a house number 10, 20, 30, 40, 50, 60, 70, 80, 90 you will find it unlocked and you can go inside. But remember you can only use it in an emergency.

Drama:

Use a row of children. Let them line up shoulder to shoulder. They must pretend that they are houses and a child leaves house number 7 and goes for a walk and it begins to rain. She must run to the nearest ten for shelter. Ask the learners what number she stopped at and at which number she started at. Ask the learner if it is quicker to run to 10 or to 0 if you started at number 7. Always count to see which way is quicker. Integrate direction left or right into your lesson.



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Do this a few times using all the multiples of ten.

Please Note: This lesson was done with a Grade 1 Class but according to the new CAPS curriculum rounding off is only introduced in Grade 3. However there is no harm in teaching this strategy to help with calculation techniques earlier in the Phase if the learners are ready.

Where would you use it? $9 + 8 \longrightarrow 10 + 8 = 18 - 1 = 17$

$38 + 7 \longrightarrow 40 + 7 = 47 - 2 = 45$

REFERENCES:

www.mathsisfun.com

www.superteacherworksheets.com

www.primaryresources.co.uk

www.sparklebox.co.uk/sa

Round up or down from the shaded number

30	31	32	33	34	35	36	37	38	39	40
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10	11	12	13	14	15	16	17	18	19	20
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70	71	72	73	74	75	76	77	78	79	80
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50	51	52	53	54	55	56	57	58	59	60
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20	21	22	23	24	25	26	27	28	29	30
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40	41	42	43	44	45	46	47	48	49	50
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60	61	62	63	64	65	66	67	68	69	70
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90	91	92	93	94	95	96	97	98	99	100
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