



education

Department:
Education

PROVINCE OF KWAZULU-NATAL

**Grades 4 to 7
Just-in-Time Training Workshop
2019: No.1**

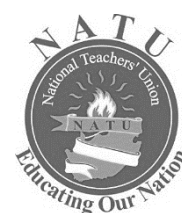
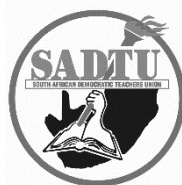
**Pre - workshop activity
MEMO**

Mathematics

Endorsed by:



Jika iMfundo
what I do matters



PRE-ACTIVITY QUESTIONNAIRE
Grades 4 to 7 Just-in-Time Training Workshop
2019: No.1

Solutions

TOTAL: 20 marks

TIME: 25 minutes

NAME: _____

SCHOOL: _____

GRADES I AM TEACHING MATHS TO THIS YEAR: _____

Answer in the spaces provided

QUESTION 1: DEVELOPING FRACTION CONCEPTS

(7 marks)

1.1 In which grades do learners start adding fractions

a) With the same denominators?

Grade 4

b) Where one denominator is a multiple of the other?

Grade 6

c) Where one denominator is not a multiple of the other?

Grade 7

(3)

1.2 In which grade do learners start adding and subtracting mixed numbers?

Grade 5

(1)

1.3 The Intermediate Phase CAPS suggests that learners should work with three different types of models or wholes. What are these different types of models or wholes? (3)

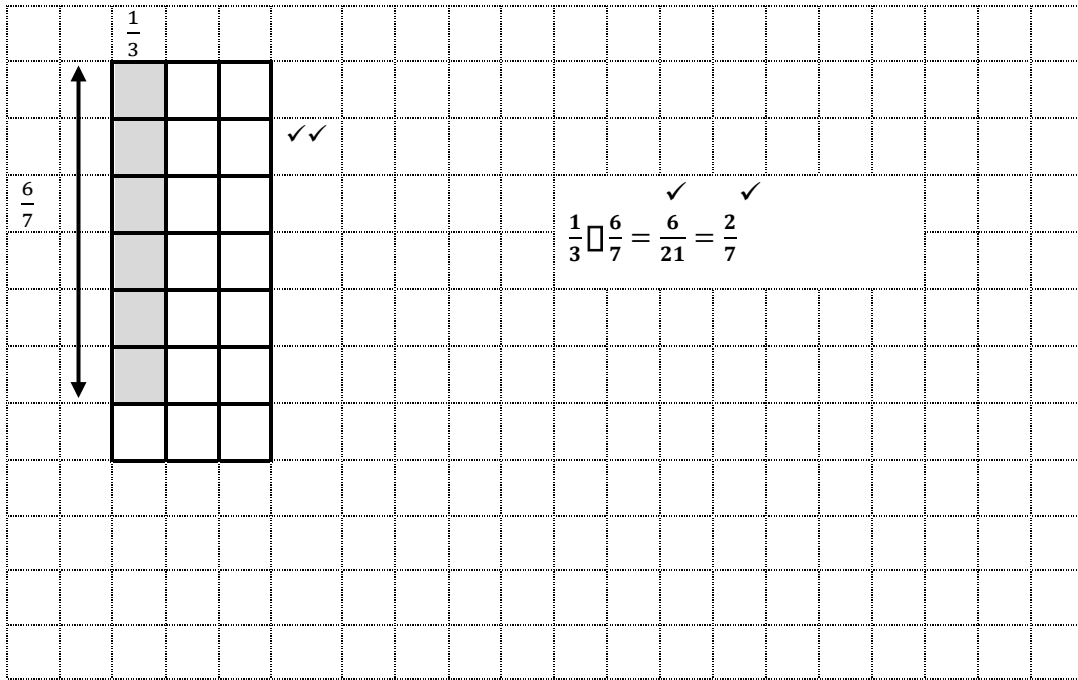
Region or area models such as paper folding, plastic shapes divided into pieces, square or dotty paper; geoboards

Length or measurement models such as fraction strips, number lines, Cuisenaire rods

Set models such as groups of objects like sweets, stones, balloons

QUESTION 2: USING CONCRETE APPARATUS TO TEACH FRACTIONS (8 marks)

2.1 On the squared paper below, draw a diagram showing how to find the answer to $\frac{1}{3} \times \frac{6}{7}$.
Write the answer in simplest form. (4)



2.2 Use the calculation $\frac{3}{4} \div \frac{3}{8}$ to explain why the division algorithm (i.e. change \div to \times and invert the second number) works.
Write your answer in simplest form. (4)

$$\begin{aligned} \frac{3}{4} \div \frac{3}{8} &= \frac{3}{4} \times \frac{8}{3} \quad \checkmark \\ &= \frac{3}{\cancel{4}^3} \times \frac{\cancel{8}^4}{\cancel{3}} \quad \checkmark \\ &= \frac{24}{12} \quad \checkmark \\ &= 2 \quad \checkmark \end{aligned}$$

QUESTION 3: USING MAGIC SQUARES TO PRACTISE FRACTIONS (5 marks)

This is a Magic Square.
Find the missing numbers.
Write them in simplest form where necessary. (5)

$\frac{2}{9} \checkmark$	$\frac{7}{9} \checkmark$	$\frac{2}{3}$
$1 \checkmark$	$\frac{5}{9}$	$\frac{1}{9} \checkmark$
$\frac{4}{9}$	$\frac{1}{3}$	$\frac{8}{9} \checkmark$