

Homework/Extension

Step 5: Tenths as Decimals

National Curriculum Objectives:

Mathematics Year 3: (3F1a) [Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10](#)

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)

Developing Identify which decimal satisfies the given criteria. Includes four options. Includes decimals which represent amounts smaller than 1.

Expected Identify which decimal satisfies the given criteria. Includes five options. Includes decimals which represent amounts smaller and equal to 1.

Greater Depth Identify which decimal satisfies the given criteria. Includes five options. Includes decimals which represent amounts smaller and equal to 1. Fractions are written as words.

Questions 2, 5 and 8 (Varied Fluency)

Developing Find the mistake that has been made, using knowledge of equivalent tenths and decimals. Includes pictorial support in the form of ten frames. Fractions and decimals represent amounts smaller than 1.

Expected Find the mistake that has been made, using knowledge of equivalent fractions and decimals. Includes pictorial support in the form of fraction counters. Fractions and decimals represent amounts smaller than 1.

Greater Depth Find the mistake that has been made, using knowledge of equivalent fractions and decimals. Fractions and decimals represent amounts smaller than 1. Some fractions are expressed as words.

Questions 3, 6 and 9 (Reasoning and Problem Solving)

Developing Calculate the length of an item using knowledge of equivalent tenths and decimals. Fractions and decimals represent amounts smaller than 1. Includes pictorial support and scaffolding.

Expected Calculate the length of an item using knowledge of equivalent tenths and decimals. Fractions and decimals represent amounts smaller than 1. Includes some scaffolding.

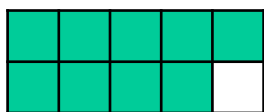
Greater Depth Calculate the length of an item using knowledge of equivalent tenths and decimals. Fractions and decimals represent amounts smaller and equal to 1. Some fractions are written in words.

More [Year 3 Fractions](#) resources.

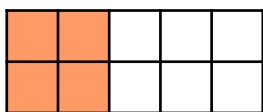
Did you like this resource? Don't forget to [review](#) it on our website.

Tenths as Decimals

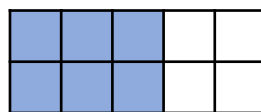
1. Tick the decimal that is less than $\frac{3}{10}$.



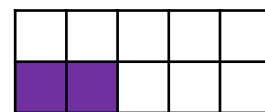
0.9

☐


0.4

☐


0.6

☐


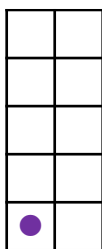
0.2

☐


VF
HW/Ext

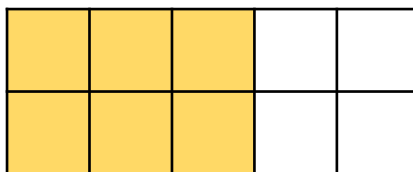
2. Bertie has labelled each image below with the decimal that it shows.

A.



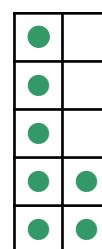
1.0

B.



0.6

C.



0.7

Spot Bertie's mistake.



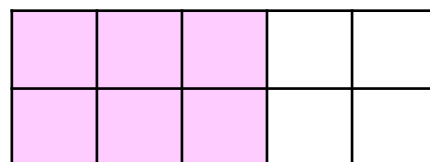
VF
HW/Ext

3. Rebecca is measuring a bookcase. She knows that 10cm equals $\frac{1}{10}$ of one metre.



Rebecca

Its length is greater than 0.6m but less than one metre.



$$\frac{\square}{\square} = 0.\underline{\quad}$$

How long could the bookcase be? Record your answer as a decimal.



RPS
HW/Ext

Tenths as Decimals

4. Tick the decimal that is greater than $\frac{4}{10}$ but less than $\frac{7}{10}$.

0.4

0.1

0.8

1.0

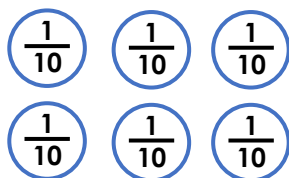
0.6

☐
☐
☐
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☐


VF
HW/Ext

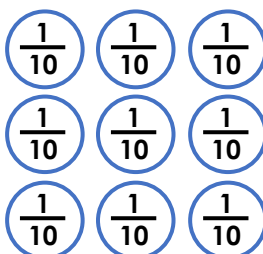
5. Rita has labelled each image below with the fraction or decimal that they show.

A.



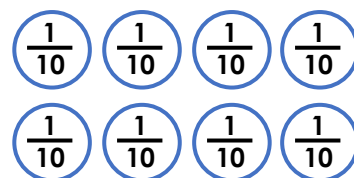
$\frac{6}{10}$

B.



0.9

C.



8.0

Spot Rita's mistake.



VF
HW/Ext

6. Sanjay is measuring a table. He knows that 50cm equals $\frac{5}{10}$ of one metre.



Sanjay

Its length is greater than 0.4m but less than one metre. It is an odd number of tenths.

$\frac{\square}{\square} = 0.\underline{\quad}$

How long could the table be? Record your answer as a fraction and a decimal.



RPS
HW/Ext

Tenths as Decimals

7. Tick the decimal that is at least one tenth more than eight tenths.

0.7

☐

0.2

☐

0.5

☐

1.0

☐

0.8

☐

VF
HW/Ext

8. Tiffany has written a list of equivalent fractions and decimals below.

A.

three
tenths

0.3

$\frac{3}{10}$

B.

0.9

$\frac{9}{10}$

nine
tenths

C.

0.1

one
tenth

$\frac{1}{10}$

D.

$\frac{8}{10}$

eight
tenths

0.8

Spot Tiffany's mistake.



VF
HW/Ext

9. Simone is measuring a cupboard. Its length is less than one metre. She knows that one metre equals $\frac{10}{10}$.



Simone

Its length is at least one tenth more than 0.5m. When written as a fraction, the total of the numerator and the denominator is even.

How long could the cupboard be? Record your answer as a fraction and a decimal.



RPS
HW/Ext

Homework/Extension

Tenths as Decimals

Developing

1. 0.2 should be ticked.
2. Bertie has swapped the order of the digits around for image A. It shows 0.1 as one tenth has been shaded.
3. Various answers, for example: $\frac{7}{10}$ or 0.7; $\frac{8}{10}$ or 0.8; $\frac{9}{10}$ or 0.9

Expected

4. 0.6 should be ticked.
5. Rita has swapped the order of the digits around for image C. It shows 0.8 as eight tenths have been shaded.
6. Various answers, for example: $\frac{5}{10}$ or 0.5; $\frac{7}{10}$ or 0.7; $\frac{9}{10}$ or 0.9

Greater Depth

7. 1.0 should be ticked.
8. Tiffany has incorrectly written 'tens' instead of 'tenths' in D.
9. Various answers, for example: $\frac{6}{10}$ or 0.6; $\frac{8}{10}$ or 0.8