



DEEPENING UNDERSTANDING ANSWER SHEET

YEAR 6 PIM – DECIMALS AS FRACTIONS

Fluency 1

0.7 is the same as 7 tenths.

0.68 is the same as 68 hundredths.

$$0.3 = \frac{3}{10}$$

$$0.02 = \frac{1}{50}$$

$$0.45 = \frac{9}{20}$$

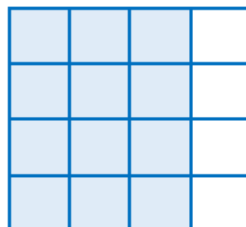
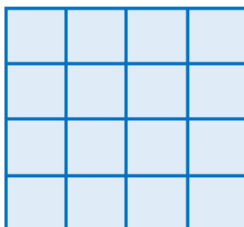
$$0.75 = \frac{3}{4}$$

$$1.5 = 1 \frac{1}{2}$$

Fluency 2



EXTENSION



Fluency 3

There are 8 squares of chocolate left.

Reasoning 1

Pupil responses should show that the statement is true.

Modelled DAB Reasoning Responses

D – True

A – All decimal numbers can be written as a fraction because they represent parts of whole numbers.

B – We can use our knowledge of place value to convert any decimal to a fraction. We can use our understanding of tenths, hundredths and thousandths etc. to work out the denominator and the numbers following the decimal point as the numerator.

Reasoning 2

Modelled DAB Reasoning Response

D – $A = 0.2$ or $\frac{2}{10}$, $B = 0.5$ or $\frac{1}{2}$, $C = 0.75$ or $\frac{3}{4}$

A – The number line has been split into 20 equal parts so I can use this information to help me find my answers.

B – Arrow A is pointing at the fourth line and four twentieths is equal to two tenths. Arrow B is pointing at the half way point which is ten twentieths or five tenths. C is pointing at the sixteenth line and sixteen twentieths is equal to three quarters.

Reasoning 3

Pupil responses should show that the statement is correct.

Modelled DAB Reasoning Response

D – The statement is correct.

A – 0.43 is less than $\frac{9}{20}$

B – We can convert the fraction to hundredths to compare the decimal and fractions. 0.43 is 43 hundredths and $\frac{9}{20}$ is 45 hundredths.



Reasoning 4

Pupil responses should show that 0.5 is the missing decimal.

Modelled DAB Reasoning Responses

D – The missing decimal is 0.5

A – It is the only decimal which is bigger than both fractions.

B – Two fifths is equal to four tenths or 0.4. Eight twentieths is equal to four tenths which is also 0.4. 0.4 is bigger than 0.2 and 0.3 but smaller than 0.5.

Download our 'DAB' posters to support reasoning in your classroom:

<https://www.deepeningunderstanding.co.uk/product/dab-reasoning-posters/>

Problem Solving 1

Darcey ate $\frac{11}{50}$.

Jerry ate $\frac{3}{20}$.

Asha ate $\frac{3}{25}$.

Caleb ate $\frac{6}{25}$.

Alfie ate $\frac{13}{50}$.

0.01 of the cake is left.

