Discussion Problems
Step 3: Tenths

Teaching note: For Q1, an A3 copy on card and scissors may be necessary.

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

About this resource:

This resource has been designed for pupils who understand the concepts within this step. It provides pupils with more opportunities to enhance their reasoning and problem solving skills through more challenging problems. Pupils can work in pairs or small groups to discuss with each other about how best to tackle the problem, as there is often more than one answer or more than one way to work through the problem.

There may be various answers for each problem. Where this is the case, we have provided one example answer to guide discussion.

We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

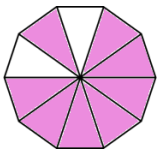
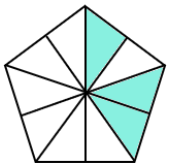
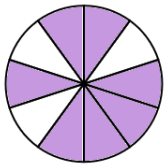
More Year 3 Fractions resources.

Did you like this resource? Don't forget to review it on our website.

Tenths

1. Add matching representations of a tenth of your choice to the two blank cards. You can use words, images or clues.

With a partner, take it in turns to match the pairs.

$\frac{4}{10}$		five tenths less than one whole	$\frac{7}{10}$		
		three tenths		between seven tenths and nine tenths	three tenths more than one tenth

The winner is the player with the most cards once all cards have been matched.

DP

2. Five children in Year 3 need help building towers which spell their favourite month of the year. Mrs Dot explains that one whole tower is made up of ten alphabet blocks.

One tower has been built for you as an example.

This tower is $\frac{5}{10}$ tall.	This tower is less than five tenths tall.	This tower is the tallest.	This tower is two tenths smaller than a whole tower.	This tower is between six tenths and eight tenths tall.

Use the clues above to find out which months could have been spelt in each tower.

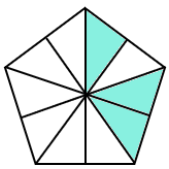
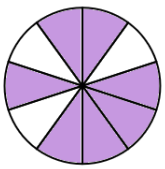
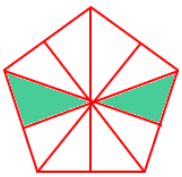
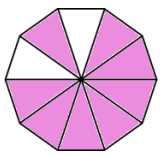
Create your own tower puzzle using tenths and the names of children in your class.

DP

Tenths

1. Add matching representations of a tenth of your choice to the two blank cards. You can use words, images or clues.

With a partner, take it in turns to match the pairs.

$\frac{4}{10}$	= three tenths more than one tenth	five tenths less than one whole	= 	three tenths	= 
	= $\frac{7}{10}$	four tenths less than six tenths	= 	between seven tenths and nine tenths	= 

The winner is the player with the most cards once all cards have been matched.

Various answers, for example: one way of matching the pairs is shown above.

DP

2. Five children in Year 3 need help building towers which spell their favourite month of the year. Mrs Dot explains that one whole tower is made up of ten alphabet blocks.

One tower has been built for you as an example.

This tower is $\frac{5}{10}$ tall.	This tower is less than five tenths tall.	This tower is the tallest.	This tower is two tenths smaller than a whole tower.	This tower is between six tenths and eight tenths tall.
M A R C H	J U L Y	S E P T E M B E R	F E B R U A R Y	O C T O B E R

Use the clues above to find out which months could have been spelt in each tower.

Various answers, for example: four possible towers have been shown above.

Create your own tower puzzle using tenths and the names of children in your class.

Various answers, for example: LUCY = $\frac{4}{10}$

DP