

Dr Fog Presents

Fractions on a number line.

Year 7 (National Numeracy Strategy)
(Based on DFEE Sample Lessons)



Resources

- Squared paper
- Worksheet on ordering fractions.



Mental Learning Objective

- I know my equivalent fractions.



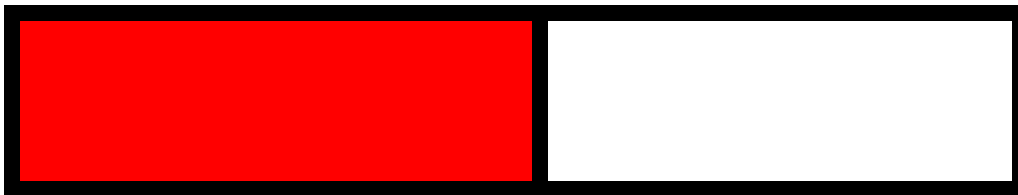
Mental Learning Task

- Can anyone remind the class what an equivalent fraction is?
- How could you show they were the same fraction?

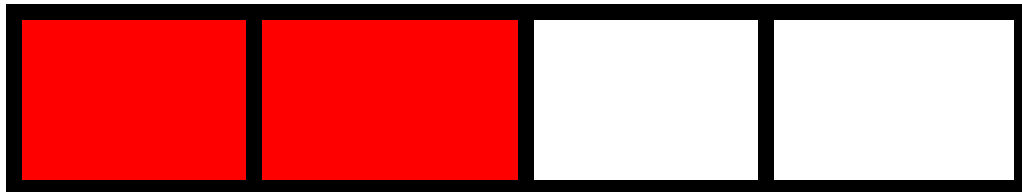


Mental Learning Task

- You could draw them as circles or rectangles, and shade them in.



$$\frac{1}{2}$$



$$\frac{2}{4}$$



Mental Learning Task

Which of these fractions are equivalent fractions?

$$\frac{1}{4}$$

$$\frac{2}{3}$$

$$\frac{3}{4}$$

$$4$$

$$3$$

$$4$$

$$\frac{5}{20}$$

$$\frac{3}{12}$$

$$\frac{12}{16}$$

$$20$$

$$\frac{4}{8}$$

$$12$$

$$16$$

$$8$$

$$\frac{4}{8}$$

$$\frac{10}{20}$$

$$\frac{9}{12}$$

$$\frac{6}{12}$$

$$\frac{2}{8}$$

$$8$$

$$20$$

$$12$$

$$12$$

$$8$$



Mental Learning Objective

- I know my equivalent fractions.



Main Learning Objective

- I can place fractions in order on a number line.
- I can compare fractions by giving them the same denominator.



Key idea

**You must make sure
all your fractions have
the same common
denominator before
you can order them.**



Main Learning Task

- Today we are going to work with ordering fractions.

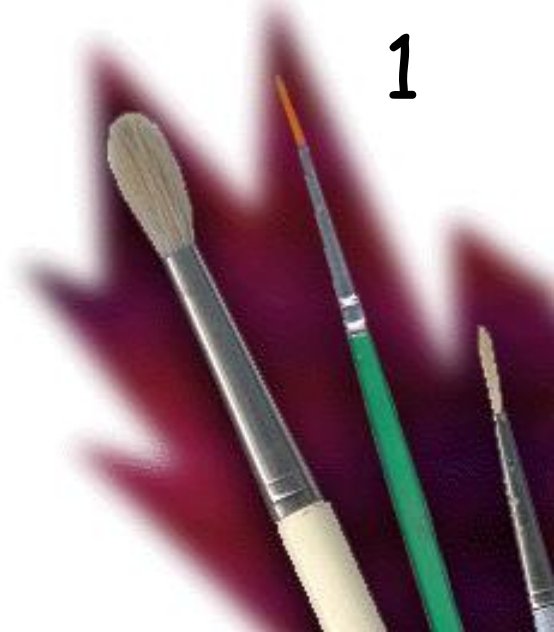


Main Learning Task

- Here is a number line, from 0 to 1.
- Where should $\frac{1}{2}$ go?

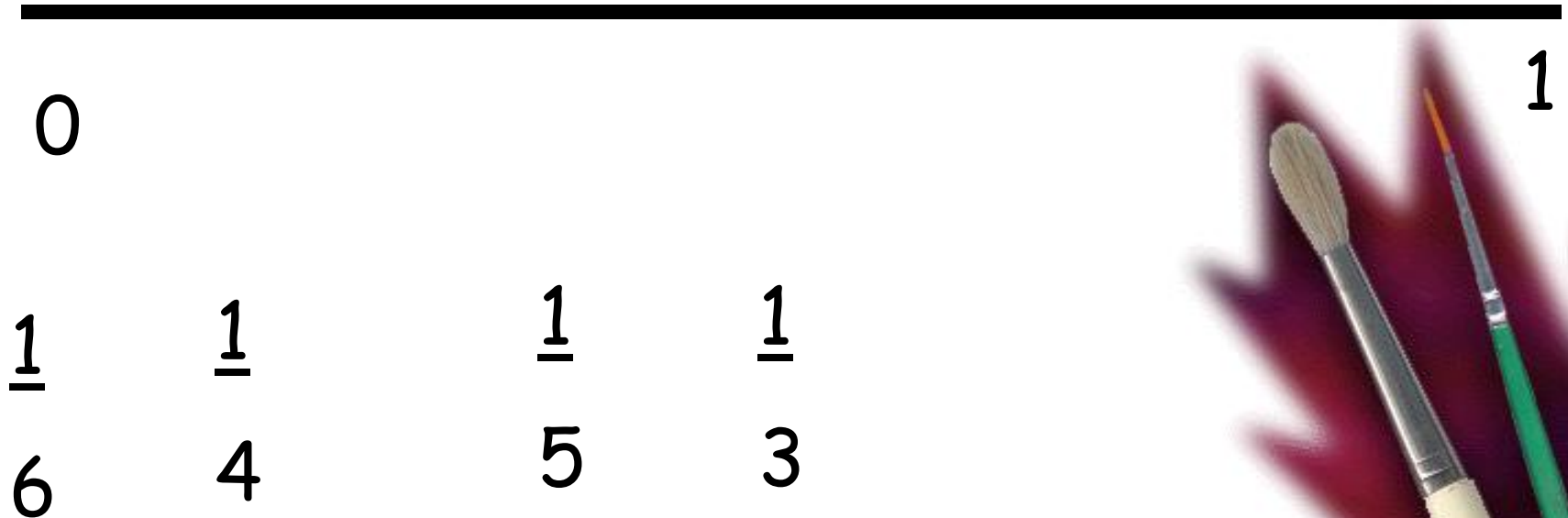
0

1



Main Learning Task

- Where should these other fractions go?

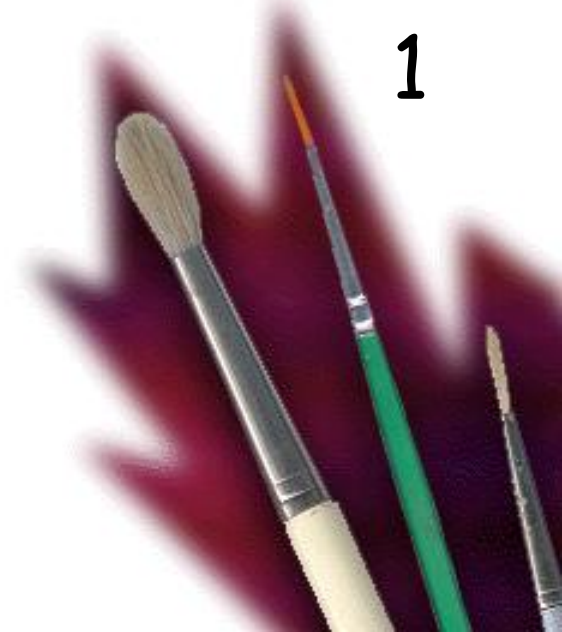


Main Learning Task

- A good check is to think "How many of that fraction make 1?"

0

1

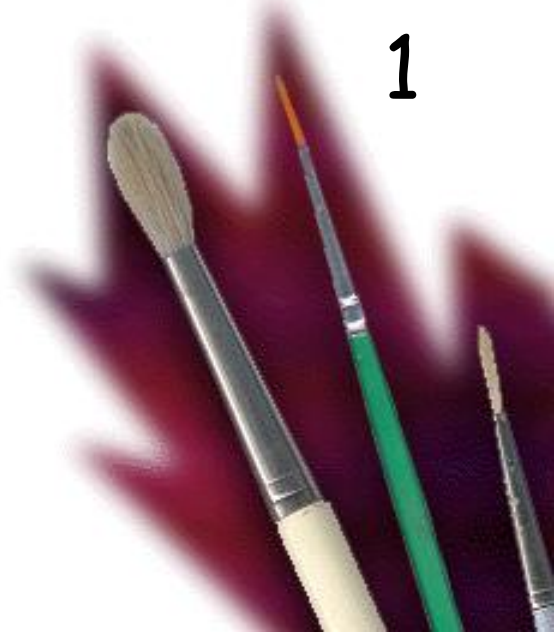


Main Learning Task

- Is $\frac{1}{4}$ closer to 0 than $\frac{1}{3}$?
- How do you know?

0

1

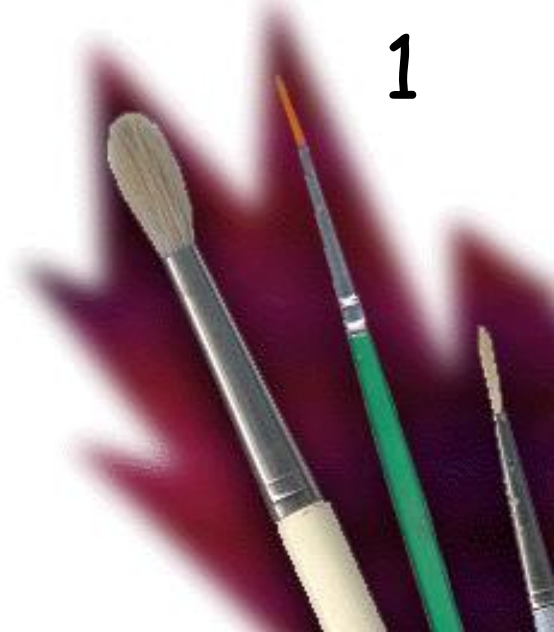


Main Learning Task

- This line is not accurate. Each place is roughly right.

0

1



Main Learning Task

- Where would you place these fractions?

0

3

6

3

4

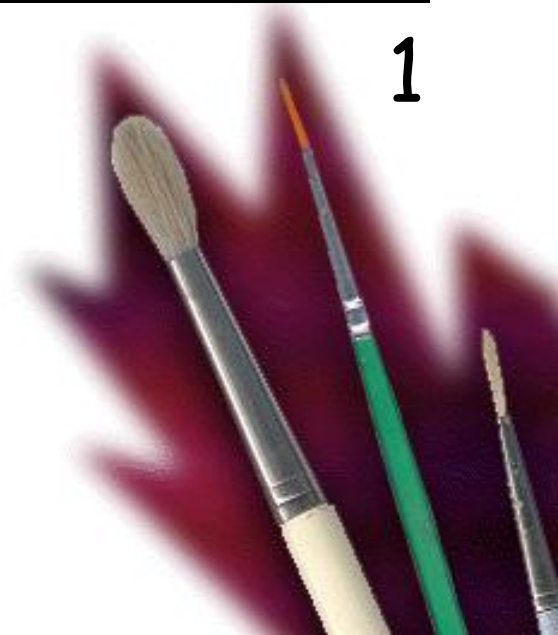
3

5

2

3

1



Main Learning Task

- Copy the fraction number line and answer these questions. Then complete a worksheet on ordering fractions.

0

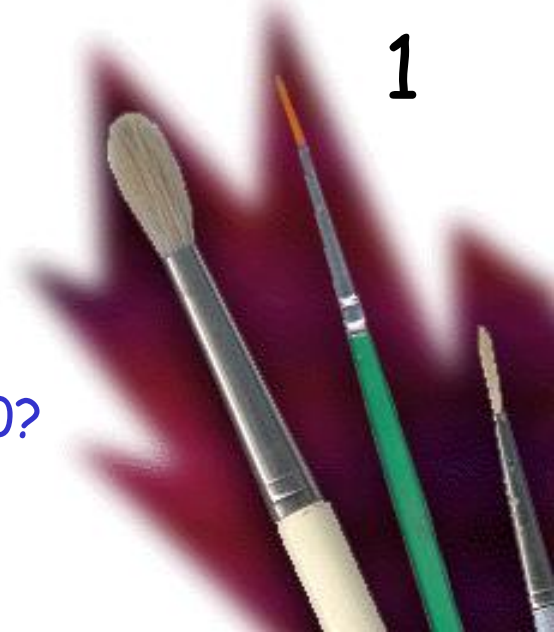
1

Is $\frac{1}{4}$ or $\frac{1}{3}$ closer to 1? Is $\frac{1}{3}$ closer to 1 or $\frac{5}{6}$?

Is $\frac{3}{5}$ closer to 1 or $\frac{1}{2}$? Is $\frac{2}{3}$ closer to 1?

Is $\frac{3}{9}$ closer to 1 than $\frac{5}{6}$? Is $\frac{6}{8}$ or $\frac{5}{6}$ closer to 0?

Is $\frac{5}{6}$ closer to 1 than to $\frac{7}{8}$?



Main Learning Objective

- I can place fractions in order on a number line.
- I can compare fractions by giving them the same denominator.



Plenary

- Share your answers to each question.
- Why did you think that?



Plenary

- Homework :-
- Everyone needs some squared paper.
- Draw a 0 - 1 line 24 squares long.
- Write down 12 fractions of your choice on the line in the correct order.
- Find fractions to challenge you!



Review of Key Idea

- You must make sure all your fractions have the same common denominator before you can order them.
- Did you learn this today?



Where Can I Find More Resources Like This?

- You can now visit my teaching resource website at <http://www.DrFog.co.uk>
- You can [click here](#) to search for more of my teaching resources.
- [Click here](#) to visit my **YES** shop!

