Lesson Printables

Be a rockstar and only print what you need!

Planners: 2-3

All Zones
Fraction Mat: 4
Recording Log: 5

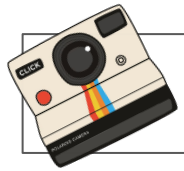
**Printing in the US? Scale to 'fit to printable area' in order to get the best print.*

LESSON 1: Fractions - Identifying fractions in real life

Starter	Main Activity and Input: Fraction pre-assessment. Finding fractions in the classroom.	Plenary
What a Hoot: How many different ways can students make 24 using the different owl numbers? **To support:** 1. Ask students how they could make 24 using addition or multiplication. Can they get close to 24? Could they use another number to get exactly 24? **To challenge:** 1. How many different solutions can students find? *Note, we have shown some number sentences that have more than one operation. You might wish to explain to students that they should solve the problem by working from left to right. If appropriate, you could discuss order of operations.*	**Input:** 1. Slide 6 shows a half-eaten donut. How could this be represented using numbers? Ask students to share and explain their thinking. Encourage as many different ideas as possible. Slide 7 explains that a fraction of the donut has been eaten. We can show this fraction as 1/2. What do students already know about fractions? Spend time sharing ideas in order to pre-assess what students already know. 2. Slide 8 explains that fractions are parts of a whole. Ask students what information they think the 1/2 fraction is showing them. Elicit from students what they think the top number means and what they think the bottom number means. Slides 9 and 10 define the numerator (the pieces or parts you are focusing on) and the denominator (the total parts or pieces in the whole). 3. Slide 11 shows 4 coloured squares. Ask students what fractions can be found in the picture. Share ideas as a class. Can students explain their reasoning for what numbers they have used as their numerators and denominators? 4. Slide 11 shows several balls of coloured wool. What fractions can students identify? What are some parts of the whole collection of wool? Ask students to share their thinking. Possible fractions and a visual can be found on slide 13. 5. Slide 13 asks students why the denominator is always the same when describing the different colours of wool, but the numerator has changed. Slides 14 to 18 model using a number line to show why the total number of pieces in the whole (the denominator) didn't change. Slide 14 uses a ruler to show measuring 6 cm and then dividing the whole number line into 6 equal pieces or 6ths. Slides 15 to 18 visually show all of the balls of wool on the number line. **Activity: Identifying fractions in real life.** 1. What fractions can students find around them? Allow students to explore any possible ideas. - Groups of colour pens/pencils/marbles/blocks (What fraction of the pens are blue?) - Groups of books. (What fraction are nonfiction? What fraction are hardback?) - Groups of playing cards. (Focus on colours, suits or numbers. What fraction are red? What fraction are diamonds?) - Groups of people in the class. (What fraction have siblings? What fraction are from the town your school is in? What fraction play football?) - Groups of dice or coins. (What fraction of the dice show even numbers? What fraction of the coins are heads?) - Note, we have also provided some picture visuals for students to use for a more structured setting. **To support:** 1. Students could write 1 fraction for each group of items and use the fraction mat in the printables for guidance. **To challenge:** 1. Encourage students to draw a visual to match their written fraction. (This is modelled using squares on the activity page.) 2. Encourage students to identify all of the fractions that can be found in their group of items. 3. Students could explore drawing their fractions on a number line. *Note, this is tricky. Students will need to draw a number line where the length matches the denominator of their fractions (number of parts in the whole). For example, if they are looking at eighths, they would draw an 8 cm long line and then divided it into 8 equal parts.*	**What's in a Name:** What fractions can students find in their names? **Check for understanding:** 1. There are a few possible ways to record fractions in a name. Students could include the fraction of vowels, consonants, repeating letters, symmetrical letters (if written in all caps), etc.

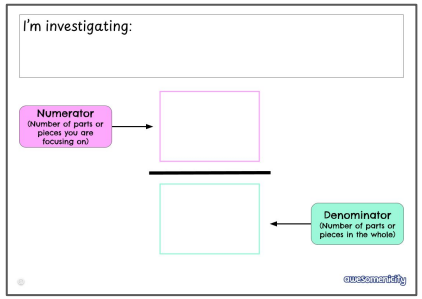
Things that might be useful for this lesson:

- Individual whiteboards:
  - ➔ Help students to record their thinking and share ideas with others.
- Fraction mats:
  - ➔ Help students to organise the numerator and denominators.
- Colour blocks, counters, etc:
  - ➔ Help students to physically create fractions.

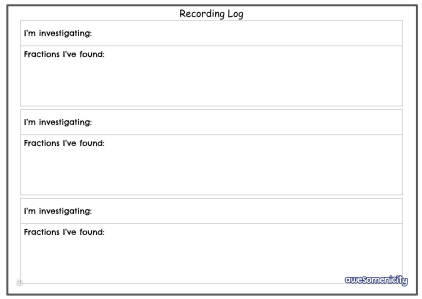


Peek at the Printables:

Fraction Mat



Recording Log

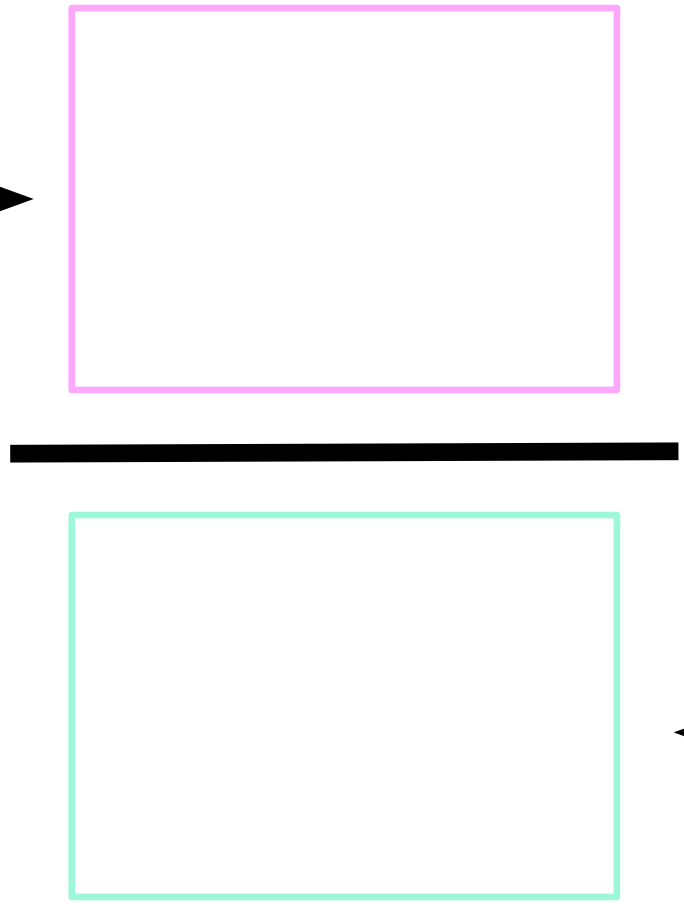


Greener Alternatives:

- ➔ Skip printing any of the printables. Students can record their thinking by taking pictures of the fractions they find or drawing/writing a representation of them in their math books.
- ➔ If you want this to be a more structured activity, create fractions stations that students can move between.

I'm investigating:

Numerator
(Number of parts or pieces you are focusing on)



Denominator
(Number of parts or pieces in the whole)

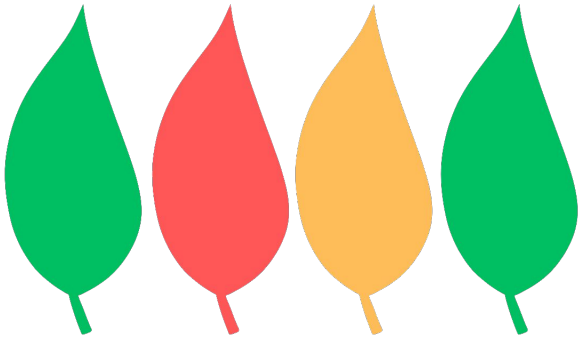
Recording Log

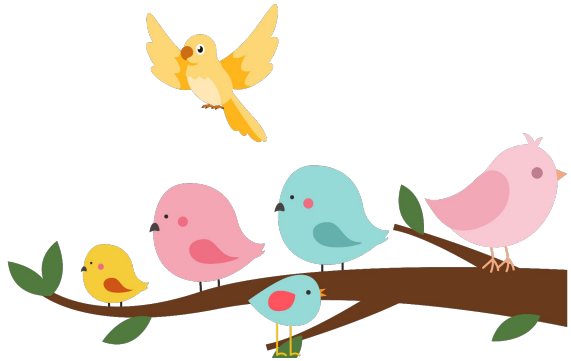
I'm investigating:
Fractions I've found:

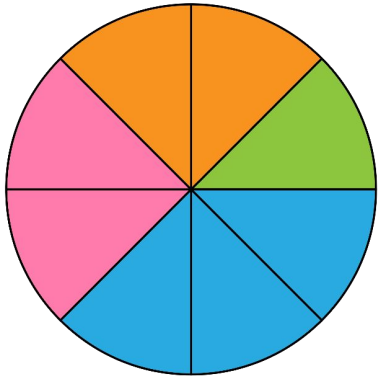
I'm investigating:
Fractions I've found:

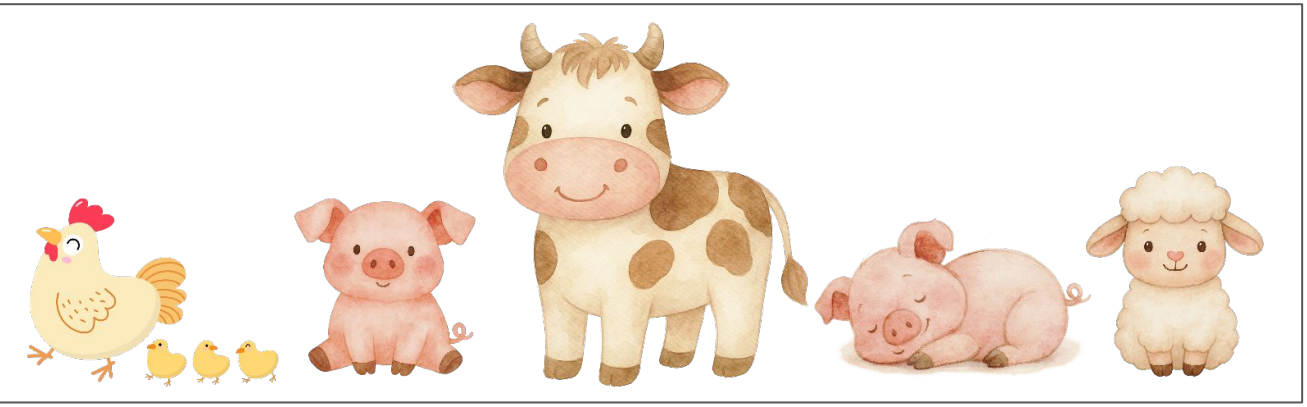
I'm investigating:
Fractions I've found:

Optional Pictures









Optional Picture Answers

Below are possible solutions, not all solutions.

Picture	Possible Fractions
Leaves	2/4 are green $\frac{1}{4}$ is red $\frac{1}{4}$ is orange/yellow
Birds	2/6 are blue ⅙ is flying 4/6 are facing left
Monsters	⅙ is green 3/6 have 2 eyes 2/6 have 3 eyes ⅙ has 1 eye
Circle	$\frac{1}{8}$ is green 2/8 is pink $\frac{3}{8}$ is blue

Picture	Possible Fractions
Balloons	1/10 is green 3/10 are red 4/10 are blue 10/10 are balloons
Farm Animals	4/8 are chickens $\frac{1}{8}$ is sleeping 4/8 have 4 legs 8/8 are animals
Fish	⅕ is out of the water ⅖ are purple ⅘ are swimming 5/5 are fish