Lesson Printables

Be a rockstar and only print what you need!

Planners: 2-3

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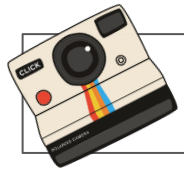
**Printing in the US? Scale to 'fit to printable area' in order to get the best print.*

LESSON 1: Fractions - Identifying fractions in real life

Starter	Main Activity and Input: Fraction pre-assessment. Finding fractions in the classroom.	Plenary
Alien Alignment: If each spaceship number is a factor of the star numbers that they connect to, what could each spaceship number be? **To support:** 1. Review the term factor and multiple. 2. Make a list of the factors of each number in the stars. Can students find any common numbers? **To challenge:** 1. Can students solve the problem without using any repeating numbers for the alien spaceships? 2. Students could make their own spaceship challenge using factors for someone else to solve.	**Input:** *Note, this lesson is a review on how to identify fractions and locate them on a number line. You could use this lesson as a pre-assessment to see what students already know about fractions.* 1. Slide 6 shows a donut that has been partially eaten. How could students show this in numbers? Ask students to share their thinking. Slide 7 explains that a fraction of the donut has been eaten. What do students already know about fractions? Spend time sharing ideas in order to pre-assess what students already know. 2. Slide 8 explicitly shows 1/4 represents the fraction of the donut that was eaten. Fractions are parts of a whole. Ask students what information they think the 1/4 fraction is showing them. Slides 9 and 10 define the numerator (the pieces or parts you are focusing on) and the denominator (the total parts of the whole). 3. Slide 11 shows a shape and models two possible fractions. What information do the fractions show? Elicit that 2/6 represents the yellow boxes and 4/6 represents the green boxes. Slide 12 shows that you can add the amounts together to prove that 6/6 is the whole. Ask students why the denominator in the number sentence hasn't changed but the numerator has. Slides 13 to 16 model using a number line to show why the total number of pieces in the whole (the denominator) didn't change. Slide 13 uses a ruler to show measuring 6 cm and then dividing the whole number line into 6 equal pieces or 6ths. *Note, this will change when students do the main activity, depending on how many parts are in their 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.* 4. Slide 17 shows several coloured pencils. What fractions can students identify? Ask students to share their thinking. Possible fractions and a visual can be found on slide 18 with a number line modelled again on slides 19 to 21. *Note, slide 21 briefly touches upon equivalent fractions. This is mainly to see which students already understand or can identify equivalent fractions. We will explore equivalence in future lessons.* **Activity: Identifying fractions in real life.** 1. What fractions can students find within the classroom or their class? Allow them to explore any possible ideas. For example: - 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 of 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. Write 1 fraction for each group of items. Students could also use a fraction mat for guidance (see printables). **To challenge:** 1. Encourage students to draw their fractions on a number line. 2. Can students identify any equivalent fractions? (This will help you assess who already has a solid understanding of equivalent fractions). What else do students know about their fractions? Can they include decimal amounts if applicable?	**What's in a name:** What fractions can students find in their name? **Check for understanding:** 1. There are a few possible ways to record fractions in a name. They could include the fraction of vowels, consonants, repeating letters, symmetrical letters (if written in all caps), etc.

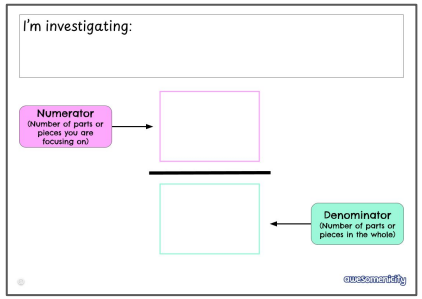
Things that might be useful for this lesson:

- 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.

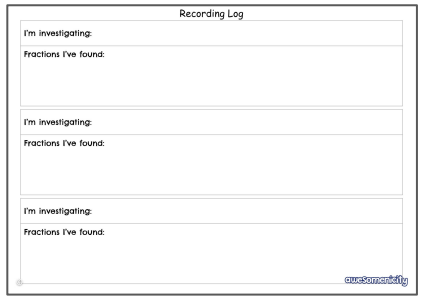


Peek at the Printables:

Fraction Mat



Recording Log

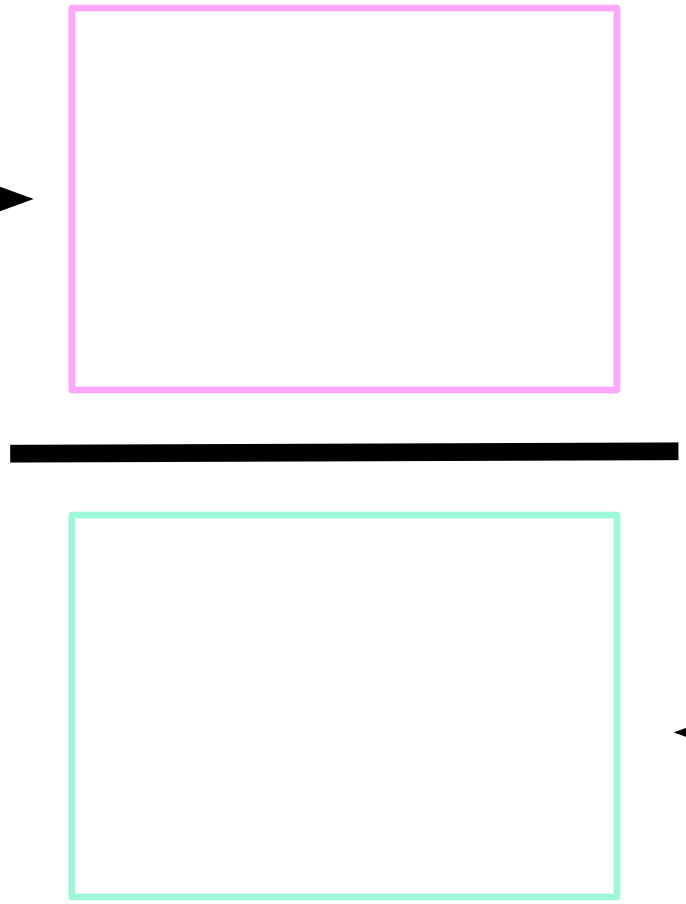


Greener Alternatives:

- ➔ 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:

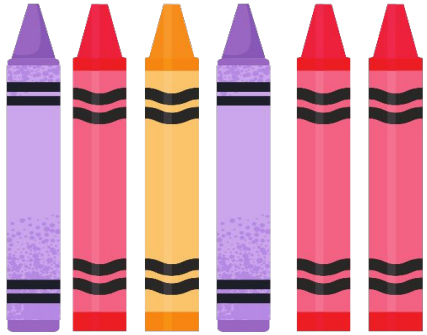
I'm investigating:

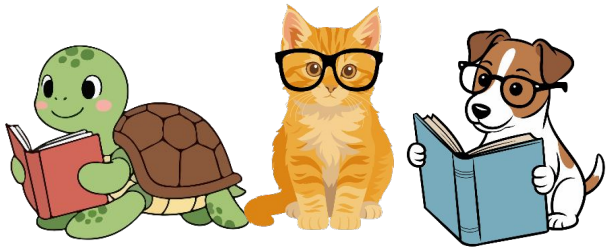
Fractions I've found:

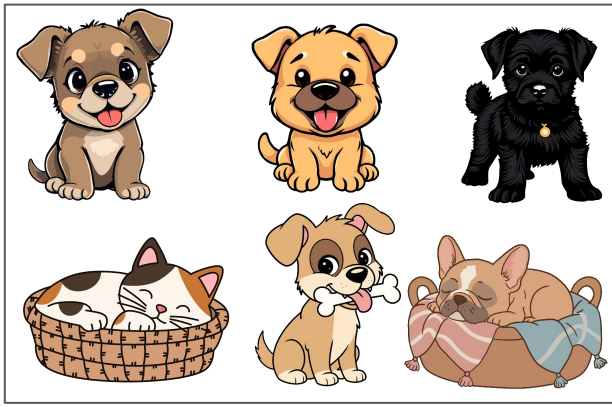
I'm investigating:

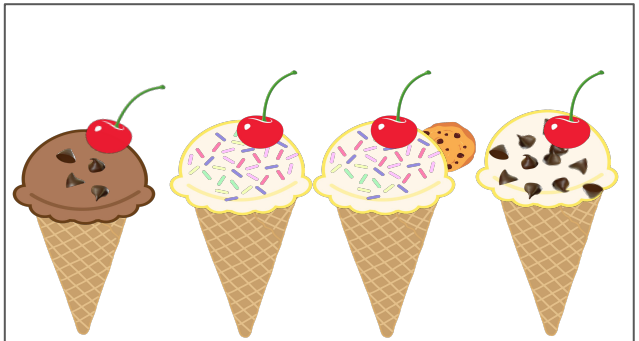
Fractions I've found:

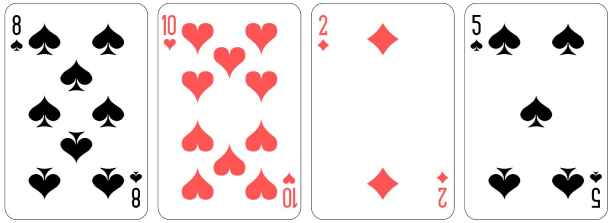
Optional Pictures











Optional Picture Answers

Below are possible solutions, not all solutions.

Picture	Possible Fractions
Crayons	3/6 or $\frac{1}{2}$ are red ⅙ is yellow 6/6 are crayons
Animals	⅔ are reading ⅔ have glasses ⅓ is a cat 3/3 have 4 legs
Wool	4/8 or $\frac{1}{2}$ are blue 2/8 or $\frac{1}{4}$ are yellow 6/8 are inside the basket
Dogs/Cat	⅚ are dogs ⅙ is a cat 2/6 are sleeping ⅙ has a bone 6/6 are pets
Coins	2/4 or $\frac{1}{2}$ are silver $\frac{3}{4}$ show heads ⅕ shows tails/a bird $\frac{1}{4}$ shows a woman's head 2/3 of the coins with heads are looking to the right

Picture	Possible Fractions
Balls	3/12 or $\frac{1}{4}$ are basketballs 4/12 or ⅓ are tennis balls 2/12 or ⅙ are baseballs 11/12 are spheres
Ice Creams	$\frac{3}{4}$ are vanilla $\frac{1}{4}$ is chocolate 4/4 have cherries $\frac{1}{2}$ have chocolate chips $\frac{1}{4}$ has a cookie
Playing Cards	$\frac{1}{2}$ or 2/4 are black $\frac{1}{4}$ are hearts $\frac{3}{4}$ are even numbers 4/4 cards
Eggs/Animals	3/8 haven't hatched $\frac{5}{8}$ have hatched 2/8 are turtles $\frac{1}{8}$ is a chicken