Lesson Printables

Be a rockstar and only print what you need!

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(Could be used when looking for fractions around your local area)
Answers: 8-9

Let's identify fractions

Why learn this?

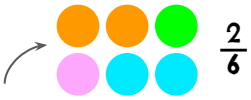
Fractions are parts of a whole. By exploring fractions around them, students develop real-life contexts for these types of numbers rather than just seeing abstract symbols on a page. When children notice fractions in everyday situations, they develop a deeper conceptual understanding of what fractions actually represent.

What are fractions?

What are fractions?
- A fraction represents a part of a whole. For example, a whole pizza that has been cut into 8 equal parts.
- The numerator is the top number and represents the number of parts or pieces being focused on.
- The denominator is the bottom number and represents the number of pieces or parts in the whole.

**Note, fractions can be mixed numbers, which are whole numbers and fractions. They will be discussed in future lessons.*

How can I find fractions in pictures?
- Identify the total amount of parts in the whole.



  - ➔ In this example, there are 6 dots in total.
  - ➔ This amount will be the denominator of all fractions associated with the picture as it represents the total amount of dots.
- Choose something to focus on.
  - ➔ In the dot picture, we could focus on the orange dots.
  - ➔ There are 2 orange dots, this means that the numerator will be 2.
- Record the fraction.
  - ➔ 2/6 of the dots are orange.
- Each picture shows several fractions.
  - ➔ 1/6 of the dots are green, 2/6 of the dots are blue, 6/6 of the dots are dots, etc.

How can my students find factions at home?
- Gather a collection of items.
  - ➔ This could be a pile of socks, a handful of lego blocks, a group of different beans, balls, colored pencils, fruit etc.
- Use the above steps to find fractions for each group or collection of items.
  - ➔ 3 of the 5 socks are white
    - ◆ The fraction is 3/5.
  - ➔ 1 of the 5 socks has a hole in it, so 1/5 of the socks are holey.

Let's warm up!

Starter Activity - Alien Alignment
Students are shown spaceships and stars. Each star has a number. It represents a multiple. The spaceships are missing their numbers. These numbers are factors of the multiples. What could each spaceship's number be?

To support, students could:
- Be asked guiding questions:
  - ➔ What is a multiple? What is a factor?
  - ➔ What are some ways you could make 18 using multiplication?

To challenge, students could:
- Make it so each spaceship has a unique number.

Let's do this!

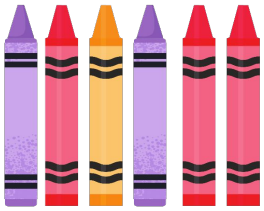
Main Activity - Students are shown 4 different pictures. What fractions can students find in each of the pictures? Encourage students to identify at least 2 fractions for each picture.

To support, students could:
- Use a fraction mat for guidance. See printables.

To challenge, students could:
- Explore trying to draw their fractions on a number line. This can be tricky to start with. Use the whole (denominator as a guide). If a student is exploring a collection of 8 socks, draw a line that is 8 centimeters long. Mark each centimeter to show the whole has been divided into 8 parts. If you work in inches, draw a line that is 8 inches long and then mark each inch.
- Go exploring! What fractions can students find?
  - ➔ Look for fractions in a pile of clothes. What fraction of the clothes are shorts? Shirts? Clean?
  - ➔ Flip over a handful of playing cards. What fraction are hearts? Spades? Odd numbers?
  - ➔ Look at a collection of mugs/cups. What fraction are blue? Chipped? Have a pattern or words?
  - ➔ Look at a collection of shoes. What fractions are sneakers? Have laces? Are left shoes?

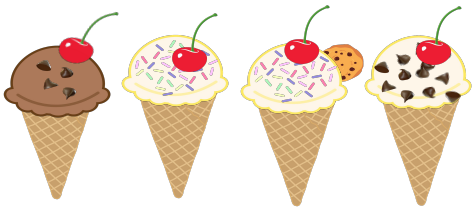
Sunlight Zone

1. What fractions can you find in the pictures?
   ➔ Identify at least 2 fractions per picture.



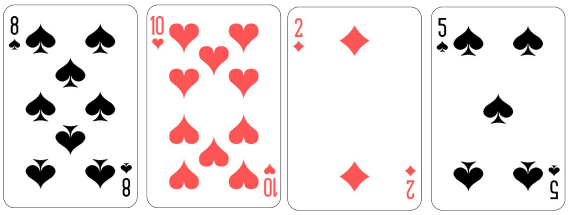
Twilight Zone

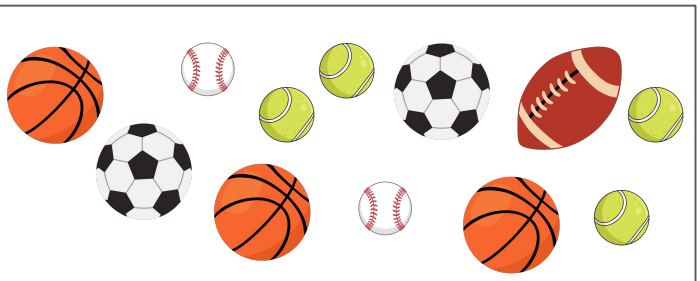
1. What fractions can you find in the pictures?
   ➔ Identify at least 2 fractions per picture.



Midnight Zone

1. What fractions can you find in the pictures?
   ➔ Identify at least 3 fractions per picture.





Fraction Mat

I'm investigating:

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

Denominator
(Number of parts or pieces in the whole)

Optional Recording Log

I'm investigating:
Fractions I've found:

I'm investigating:
Fractions I've found:

I'm investigating:
Fractions I've found:

I'm investigating:
Fractions I've found:

Answers

Below are possible solutions, not all solutions.

Sunlight Answers	
Crayons	1/6 is purple 3/6 are red 6/6 are crayons
Wool	4/8 or 1/2 are blue 2/8 or 1/4 are yellow 7/8 are not red 6/8 are inside the basket
Animals	2/3 are reading 2/3 have glasses 1/3 is a cat 3/3 have 4 legs
Coins	2/4 or 1/2 are silver 3/4 show heads 1/5 shows tails/a bird 1/4 shows a woman's head 2/3 of the coins with heads are looking to the right

Twilight Answers	
Wool	4/8 or 1/2 are blue 2/8 or 1/4 are yellow 7/8 are not red 6/8 are inside the basket
Dogs/Cat	5/6 are dogs 1/6 is a cat 2/6 are sleeping 1/6 has a bone 6/6 are pets
Ice Creams	3/4 are vanilla 1/4 is chocolate 4/4 have cherries 1/2 have chocolate chips 1/4 has a cookie
Eggs/Animals	3/8 haven't hatched 5/8 have hatched 2/8 are turtles 1/8 is a chicken

Answers

Below are possible solutions, not all solutions.

Midnight Answers	
Playing Cards	$\frac{1}{2}$ or 2/4 are black $\frac{1}{4}$ are hearts $\frac{3}{4}$ are even numbers 4/4 cards
Dogs/Cat	5/6 are dogs 1/6 is a cat 2/6 are sleeping 1/6 has a bone 6/6 are pets
Ice Creams	2/6 or ⅓ are chocolate 4/6 or ⅔ are vanilla 3/6 or $\frac{1}{2}$ have chocolate chips 6/6 have a cone
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