Adding and Subtracting Fractions 1

Information

Common core icons

This icon indicates a slide where the Standards for Mathematical Practice are being developed. Details of these are given in the Notes field.

Slides containing examples of mathematical modeling are marked with this stamp.

This icon indicates an opportunity for discussion or group work.

The **Standards for Mathematical Practice** outlined in the Common Core State Standards for Mathematics describe varieties of expertise that mathematics educators at all levels should seek to develop in their students.

These are:

1) Make sense of problems and persevere in solving them.

2) Reason abstractly and quantitatively.

3) Construct viable arguments and critique the reasoning of others.

4) Model with mathematics.

5) Use appropriate tools strategically.

6) Attend to precision.

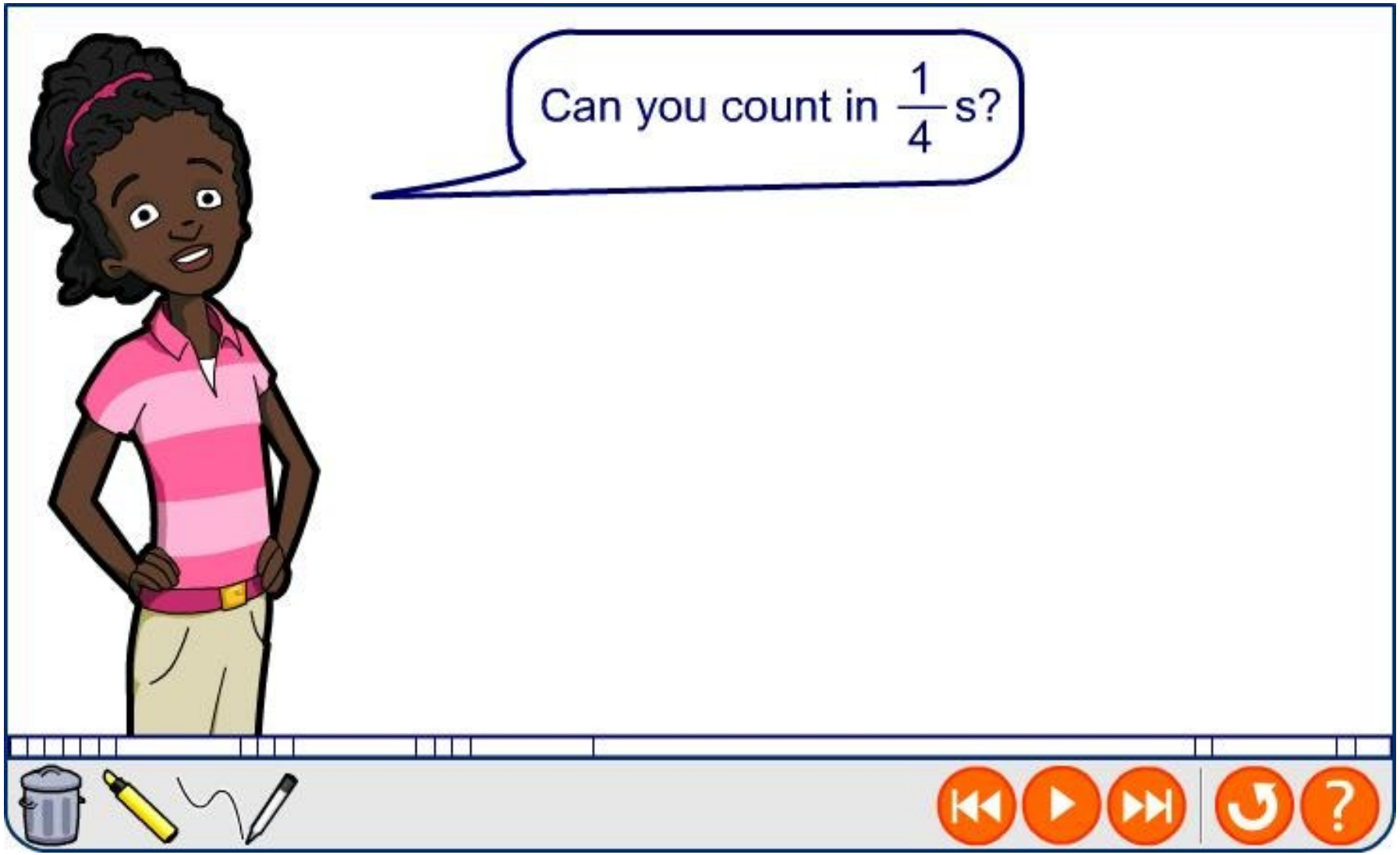
7) Look for and make use of structure.

8) Look for and express regularity in repeated reasoning.

This icon indicates that the slide contains activities created in Flash. These activities are not editable.

This icon indicates teacher's notes in the Notes field.

Mixed numbers



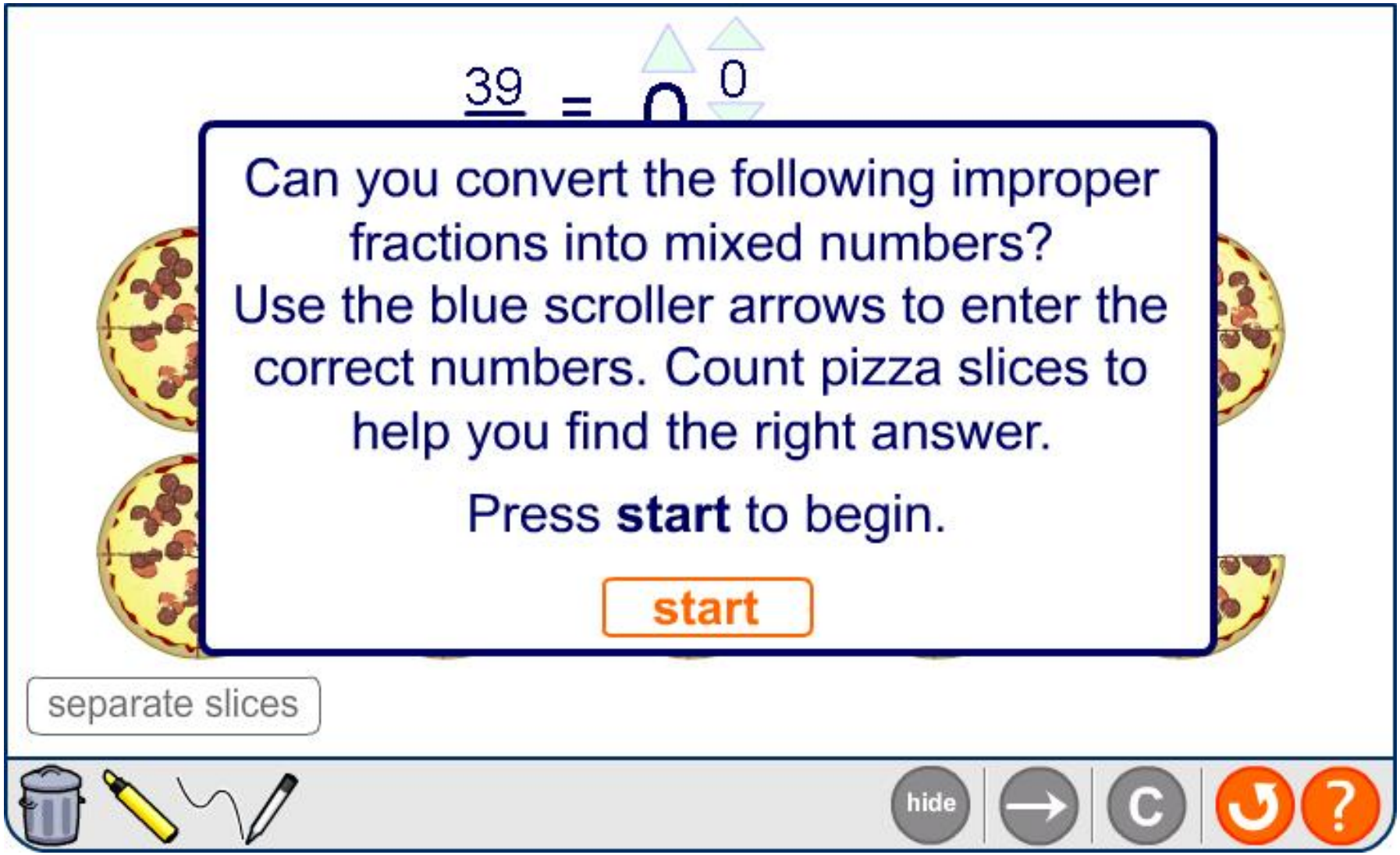
Fractions greater than 1

Drag each fraction to the appropriate box.

Press **start** to begin.

start

Fractions and mixed numbers



Mixed numbers and fractions

$5\frac{2}{\square} = \frac{0}{\square}$

Can you convert the following mixed numbers into improper fractions? Use the blue scroller arrows to enter the correct numerator. Count pizza slices to help you find the right answer.

Press **start** to begin.

start

separate slices

hide

Counting wheel

0

Step:

Use this fraction wheel to practice counting in fractions. Pick a fraction to count in from the buttons on the left. Press the forward and backward arrows to start counting.

Press **start** to begin.

start

$\frac{1}{2}$ $\frac{3}{4}$

bers

ctions

How much is left?

Alex eats $\frac{2}{3}$ of a chocolate bar.

How much is left?

Fractions that add up to 1

$\frac{8}{9}$ $\frac{1}{9}$

Match the pairs of fractions that add up to 1.

Press **start** to begin.

start

$\frac{5}{9}$ $\frac{2}{9}$

S

Adding and subtracting fractions

When fractions have the same denominator, it is easy to add and subtract them.

For example:

$$\frac{3}{5} + \frac{1}{5} = \frac{3+1}{5} = \frac{4}{5}$$

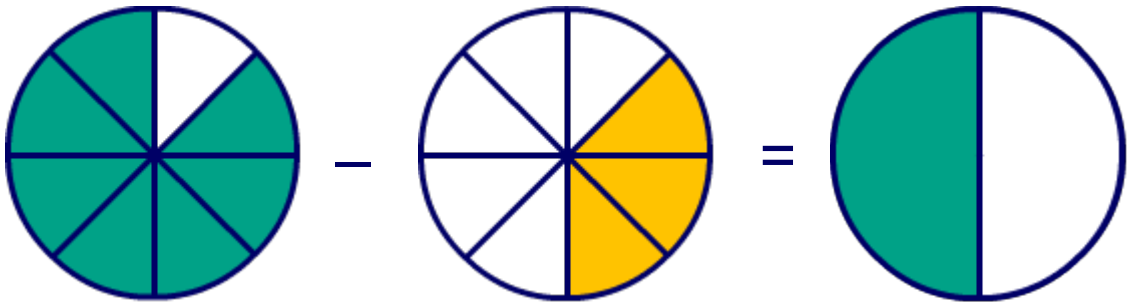
Can you draw a diagram to prove this is correct?

Adding and subtracting fractions

$$\frac{7}{8} - \frac{3}{8} = \frac{7-3}{8} = \frac{4 \div 4}{8 \div 4} = \frac{1}{2}$$

Fractions should always be reduced to their **lowest terms**. We can do this by dividing the numerator and denominator by the same number.

Can you draw a diagram to prove this is correct?

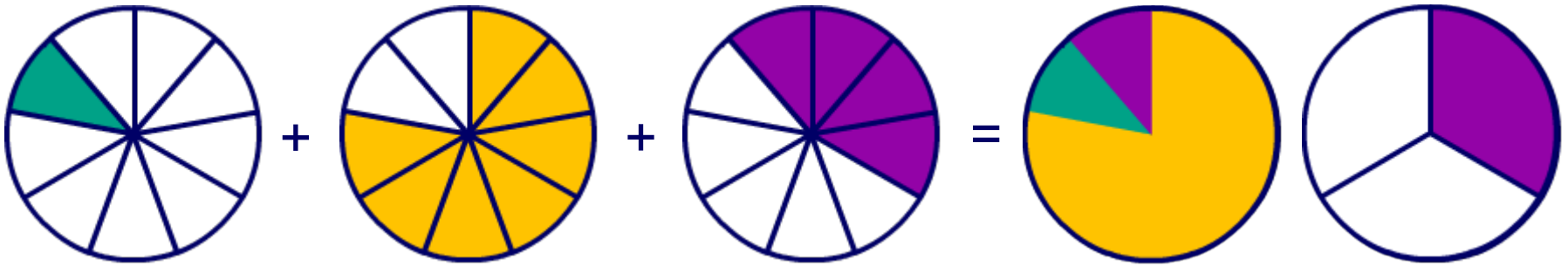


Adding and subtracting fractions

$$\frac{1}{9} + \frac{7}{9} + \frac{4}{9} = \frac{1 + 7 + 4}{9} = \frac{12}{9} = 1\frac{3}{9} \begin{matrix} \div 3 \\ \div 3 \end{matrix} = 1\frac{1}{3}$$

Improper fractions should usually be written as **mixed numbers**.

Can you draw a diagram to prove this is correct?



Fraction problems

One of Taylor's chores is weeding the garden. She has already weeded $\frac{5}{8}$ of the garden. How much does she have left to do?

$\frac{8}{8}$

$\frac{3}{8}$

$\frac{4}{8}$