Name _____ Date _____

Fraction Detectives

PART 1 What changes?

1 ON YOUR OWN The same fraction, different sets.

$\frac{2}{3}$ of 12 = ☐ $\frac{2}{3}$ of 18 = ☐ $\frac{2}{3}$ of 30 = ☐

What changes and what stays the same?

_____

2 ON YOUR OWN The same set, different fractions. The set has 24 objects.

$\frac{1}{4}$ of 24 = ☐ $\frac{2}{4}$ of 24 = ☐ $\frac{3}{4}$ of 24 = ☐ $\frac{1}{6}$ of 24 = ☐ $\frac{5}{6}$ of 24 = ☐

Which is the greatest? Why is $\frac{2}{4}$ of 24 the same as $\frac{1}{2}$ of 24?

_____

3 IN A GROUP **Error detectives.** Decide whether each solution is correct. Prove it in the app or with objects, and correct the wrong ones.

Ema: $\frac{2}{3}$ of 12 = 6 because 12 ÷ 2 = 6 **CORRECT** / **WRONG**

Correction: _____

Luka: $\frac{1}{4}$ of 20 = 4 because each group has 4 **CORRECT** / **WRONG**

Correction: _____

Mia: $\frac{3}{4}$ of 24 = 6 because 24 ÷ 4 = 6 **CORRECT** / **WRONG**

Correction: _____

Ivan: $\frac{2}{5}$ of 15 = 6 because 15 ÷ 5 = 3 and 2 × 3 = 6 **CORRECT** / **WRONG**

Correction: _____

Names (pair) _____ Date _____

PART 2

Pair game: Fraction of a set

1. Cut out the set cards and the fraction cards and put them in two piles, face down.
2. Draw one set card and one fraction card. Work out the fraction of the set and explain how.
3. If the set can't be shared into equal parts, say "It can't!" and explain why. That is a correct answer too.
4. Your partner checks in the app. A correct answer scores a point.

12 objects	18 objects	20 objects	24 objects	30 objects	36 objects	$\frac{1}{2}$	$\frac{1}{3}$
$\frac{2}{3}$	$\frac{1}{4}$	$\frac{3}{4}$	$\frac{1}{5}$	$\frac{2}{5}$	$\frac{1}{6}$	$\frac{5}{6}$	$\frac{3}{8}$

	Set	Fraction	Calculation	Point
1.				
2.				
3.				
4.				
5.				
6.				

How am I doing?

- ☐ I can find a fraction of a set and explain it to someone else.
- ☐ I can, but I need objects or the app.
- ☐ I need more practice.