

# FAIR SHARES

E CA AC EA AA AM AP

*I am learning to find halves, quarters, and other fractions of sets and shapes.*

**PRIOR KNOWLEDGE REQUIRED:** To do this I must first be able to state the numbers from 1-20 both forwards and backwards.

1) Complete the table.

Number before	Number	Number after	Number before	Number	Number after
a)	<b>16</b>		e)	<b>13</b>	
b)	<b>12</b>		f)	<b>19</b>	
c)	<b>11</b>		g)	<b>8</b>	
d)	<b>7</b>		h)	<b>4</b>	

**NEW STRATEGY USING MATERIALS:**

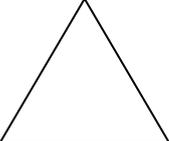
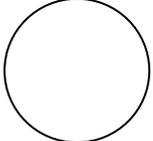
2) Using a pencil and ruler cut the following shapes in half.

$$\frac{1}{2} \longrightarrow$$

2 is the denominator. This means the object must be split into this many **equal parts**.

 a)	 b)	 c)	 d)
e) Discuss with a partner if there is more than one way to cut these shapes in half.		f) Why is it difficult to cut the shape above in half?	

3) Cut these shapes out of paper and see how many ways you can fold them in half.

 a)	 b)	 c)
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4) Four people want to share the food below. Cut them into quarters.

$$\frac{1}{4} \longrightarrow$$

4 is the denominator. This means the object must be split into this many **equal parts**.

 a)	 b)	 c)
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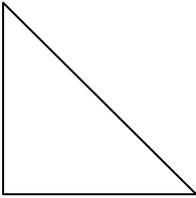
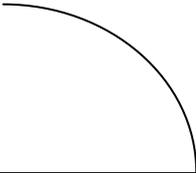
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**NEW STRATEGY WITH IMAGING:**

1) There is more than one answer to these questions.

	
<p>a) This is one-half of a shape what might the full shape look like?</p>	<p>b) This is one-half of a shape. What might the full shape look like?</p>
	<p>d) Make up one for your partner.</p>
<p>c) This is one-quarter of a shape. What might the full shape look like?</p>	

e) Draw another shape that the triangle could be half of.

**WORD PROBLEMS USING NUMBER PROPERTIES:**

2) Kate has 8 pieces of birthday cake. She gives  $\frac{1}{2}$  to her brother. How many pieces does her brother have?

3) Steve had 20 sweets. He loses  $\frac{1}{2}$  of them. How many does he have left?

4) Allen has 8 cousins.  $\frac{1}{4}$  of them live in the North Island. How many live in the North Island?

5) Anna has 4 tennis balls. She loses  $\frac{1}{4}$  of them. How many tennis balls does she lose?