Scale Diagrams, Enlargements and Reductions

Name: _____ Date: _____

Learning Goal 7.2	I can determine the scale factor of an enlargement or reduction and use it to reduce or enlarge an image.

Enlargement Something that appears larger than the original (O)
↳ image (I)

- Scale factor will always be bigger than one.

Reduction The original is larger than the image
- made the original smaller

$0 <$ scale factor < 1

Consider the following pictures. Do they represent an image that has been reduced or enlarged?

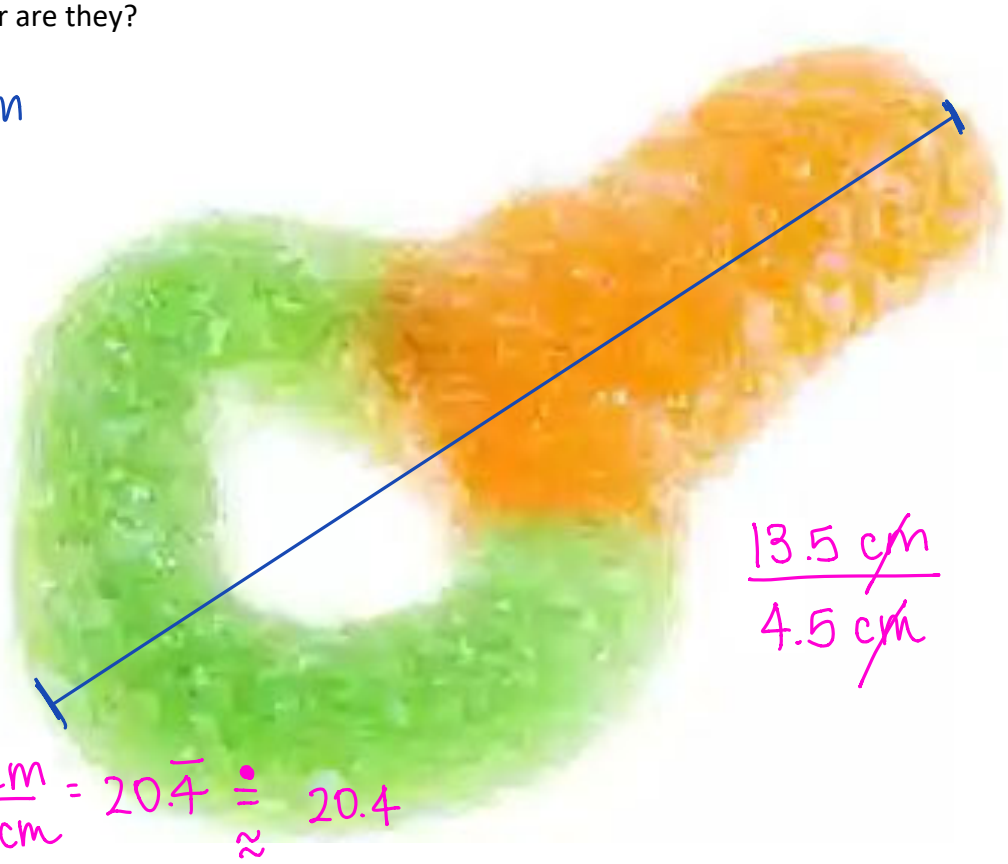
Image 1	
Image 2	
Image 3	
Image 4	
Image 5	
Image 6	

Assignment p.323 #4 – 8, 11, 12, 15
p. 329 #1, 3, 4 – 8, 20

Quiz: Next Day!

Scale Diagrams, Enlargements and Reductions

Now, how much bigger/smaller are they?



Original: 4.5 cm

Enlargements → improper fraction

- paper image : 13.5 cm
  SF = $\frac{13.5}{4.5} = 3$
- projector image : 92 cm
  SF = $\frac{92\text{ cm}}{4.5\text{ cm}} = 20.\overline{4} \approx 20.4$

Scale factor = $\frac{\text{original}}{\text{image}}$ or $\frac{\text{image}}{\text{original}}$

How would the scale factor of a map compare to that of the sour key?

Reduction $0 < SF < 1$

Reductions	Enlargements
$0 < SF < 1$	$SF > 1$

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