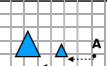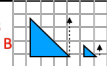# Enlargement

Animated PPSX

Transformation

is a process that changes the position, shape or viewing angle of any shape.

- position
- shape
- viewing angle

Types of Transformation

translation | rotation | reflection | enlargement

Enlargement

Making a shape bigger

Scale factor
(how much bigger the shape should become)

1
3

1
1
1

Scale factor 3

3 3 3

Enlargement

Making a shape bigger

Scale factor
(how much bigger the shape should become)

2
1

2
2

1 1

Scale factor 2

Enlargement

Centre of enlargement
(point from which the shape becomes bigger)

centre of enlargement
1 1

centre of enlargement
1 0.5 1 0.5
0.5

2

2

Scale factor 2   Scale factor 2

Enlargement

Centre of enlargement
(point from which the shape becomes bigger)

1
1
1
1 1 1 1 1

centre of enlargement

Scale factor 3

Is this enlargement?

✅   ❌

❌   ❌

Is this enlargement?

✅   ❌

❌   ✅

Find the scale factor

1
1
1
2
6

Scale factor 6:2=3

Find the scale factor

6
3
1
2

Scale factor 2:1=2

Enlargement
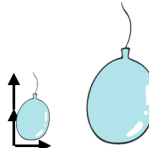
Class _____ Name _____ Date _____
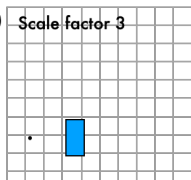
Enlargement

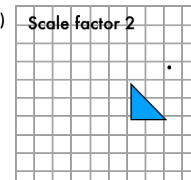s.f. 2 about A   s.f. 3 about B

1. Use a ruler and find the scale factor for the given enlargement.

a)   b)
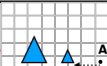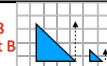
Scale factor _____   Scale factor _____

2. Enlarge each shape to the given scale factor. Pay attention to the enlargement centre.
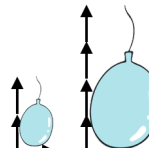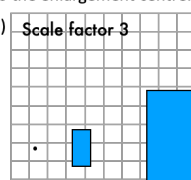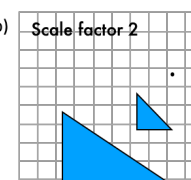
a) Scale factor 3   b) Scale factor 2

PDF worksheet with keys

Enlargement

Enlargement

Enlarge each shape in the corresponding centre by the given scale factor to reveal a picture.

The shapes should not overlap but their edges might meet.

s.f. 2 about A
s.f. 3 about B

s.f. 2 about A
s.f. 2 about I
s.f. 2 about B
s.f. 2 about C
s.f. 2 about E
s.f. 2 about I
s.f. 2 about D
s.f. 2 about H
s.f. 2 about F
s.f. 3 about F

Enlargement

Enlarge each shape in the corresponding centre by the given scale factor to reveal a picture.

The shapes should not overlap but their edges might meet.

s.f. 2 about A
s.f. 3 about B

s.f. 2 about A
s.f. 2 about I
s.f. 2 about B
s.f. 2 about C
s.f. 2 about E
s.f. 2 about I
s.f. 2 about D
s.f. 2 about H
s.f. 2 about F
s.f. 2 about G

Enlargement

Enlarge each shape in the corresponding centre by the given scale factor to reveal a picture.

The shapes should not overlap but their edges might meet.

s.f. 2 about A
s.f. 3 about B

s.f. 2 about A
s.f. 2 about I
s.f. 2 about B
s.f. 2 about C
s.f. 2 about E
s.f. 2 about I
s.f. 2 about D
s.f. 2 about H
s.f. 2 about F
s.f. 3 about F
s.f. 2 about G

PDF + Reveal the picture+ Keys