1) 2 left
3 down
3 right
2 up
3 left
4 down
2) New positions are shown in red.


3 left
4 up


4 right
2 down


4 left
3 up

1) No, Samira has not done this correctly. A translated shape should not be different in size. It should be congruent.
2) True or False?
a) False. The square has been translated 2 right and 3 down.
b) True. A translated shape should still have the same dimensions.
c) False. Each vertex of the triangle should move the same distance in the same direction left/right and up/down. The triangle has been rotated by $90^{\circ}$.
3) Teacher to check translations. Ensure that instructions are written left/right then up/down.
4) Describe the translations of fruit $A$ to their new positions labelled $B$.

$\qquad$ left
$\qquad$ down

$\qquad$
$\qquad$ left/right up/down

$\longrightarrow$
$\qquad$


4 left
3 up


1) Samira has translated triangle A 3 left, 2 down. Has she done this correctly?

Circle yes / no.
Explain your answer.
Translate these shapes and draw them in their new positions.


3 left
4 up


4 right
2 down

2) True or False? Explain your answer.

|  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| B |  |  | A |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  | $A$ | $A$ |  |  |
|  |  |  |  |  |  |

a) The blue square $A$ has been translated 2 left and 3 down.
b) When a shape is translated, it does not change size.
c) Triangle $B$ could be a translation of triangle $A$.

1) Using the shapes $(A, B, C)$ in their original positions, translate them to new positions to create a picture. Write down the description of how each shape has been translated.


Now give your descriptions to your learning partner. Can they translate each shape as you have described to create an identical picture to yours? Are all your descriptions correct?


## Diving into Mastery Guidance for Educators

Each activity sheet is split into three sections, diving, deeper and deepest, which are represented by the following icons:


These carefully designed activities take your children through a learning journey, initially ensuring they are fluent with the key concept being taught; then applying this to a range of reasoning and problem-solving activities.

These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.

## National Curriculum Objective

- Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.

Describe the translations of the fruit $(A)$ in each grid to their new positions (B).

_ 3 left
_1 down


- 3 rliefthtright

1dapardown




The square, triangle and rectangle have been translated to make a picture of a church. How was each shape translated?

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Square - 2 right, 5 down Rectangle - 8 right, 4 down Triangle - 8 right, 4 up

Translate the triangle, square and rectangle to new positions to create a picture. Write down the description of how each shape has been translated. Can your learning partner follow your instructions to create an identical picture?

|  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  | $A$ |  |  |
|  |  |  |  |  |  |  |  |  |  |  |




1) Describe the translations of fruit A to their new positions labelled $B$.

$\qquad$ left
down

left/right
up/down

$\qquad$
2) Translate these shapes and draw them in their new positions.

3) Samira has translated triangle $A 3$ left, 2 down. Has she done this correctly? Circle yes / no. Explain your answer.

4) True or False? Explain your answer.

a) The blue square $A$ has been translated 2 left and 3 down.
b) When a shape is translated, it does not change size.
c) Triangle B could be a translation of triangle $A$.
5) Copy these shapes $(A, B, C)$ on squared paper. Translate them to new positions to create a picture and write down the
 description of how each shape has been translated.


Now give your descriptions to your learning partner. Can they translate each shape as you have described to create an identical picture to yours? Are all your descriptions correct?

1) Describe the translations of fruit $A$ to their new positions labelled $B$.

up/down
$\qquad$ down $\qquad$

left

left/right
and
2) Translate these shapes and draw them in their new positions.


3 left
4 up


4 right
2 down


4 left
3 up

1) Samira has translated triangle $A 3$ left, 2 down. Has she done this correctly? Circle yes / no. Explain your answer.

2) True or False? Explain your answer.

a) The blue square $A$ has been translated 2 left and 3 down.
b) When a shape is translated, it does not change size.
c) Triangle B could be a translation of triangle $A$.
3) Copy these shapes $(A, B, C)$ on squared paper. Translate them to new positions to create a picture and write down the
 description of how each shape has been translated.


Now give your descriptions to your learning partner. Can they translate each shape as you have described to create an identical picture to yours? Are all your descriptions correct?

