

Level 2 POSITION

Bloomsmath is a comprehensive mathematics program which provides a fun way for every student to be learning to the best of their ability.

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Position

Level 2 is designed for students in their second year at school often called Year 1. The Position strand allows students to represent the position of objects using models and drawings and describe these using everyday language.

Knowledge: Students will follow the directions given to find items on the grid and write where they ended up ie 2 boxes south, 2 boxes west, resulted in them being at the shell.



Students who demonstrate proficiency in this activity move on to Comprehension.



Students stop here as they require additional teacher support to master this activity.

Comprehension: Students find objects given grid references and must draw the shape found at each co-ordinate.



Students who demonstrate proficiency in this activity move on to Application.



Students stop here if time has run out or they require additional support with this activity.

Application: Students place a selection of given objects in their correct location using grid references.



Students who demonstrate proficiency in this activity move on to Analysis.



Students stop here if time has run out or they require additional support with this activity.

Analysis: Students use a given treasure map to create a map path for a partner to solve using both directions and grid references to assist their partner find the buried treasure. Decoy treasures are also hidden.



Students who demonstrate proficiency in this activity move on to Synthesis.



Students stop here if time has run out or they require additional support with this activity.

Synthesis: Students reduce the size of a given picture using a grid so that they can see how scale drawings are created and grids used.

Evaluation: Suggested questions provide a starting point for discussions related to Position.



Students may complete more or fewer activities for each learning outcome depending on the time allocated and their strength in the area being covered.



All students should participate in the Evaluation discussion to encourage the use of mathematical language, logical reasoning and reflection on that which they have completed.

Follow The Directions

Follow each set of directions and draw the object you find each time.

- 1. From Start move 3 South and 4 East.
- 2. From Start move 4 North, 2 West and 2 South.
- 3. From Start move 3 South, 3 West and 2 North.
- 4. From Start move 1 South, 2 East, 2 South, 3 West and 1 North.
- 5. From Start move 3 North, 4 East, 3 South and 2 West.
- 6. From Start move 3 North, 4 East, 1 North and 1 West.







Progress To Comprehension

Position - Level 2 - Students will represent the position of objects using co-ordinates and directions Comprehension Application Analysis Synthesis Evaluation

Knowledge

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Find The Shape

Draw the shape found at each given co-ordinate.







Progress To Application

Position - Level 2 - Students will represent the position of objects using co-ordinates and directions.

Knowledge

Comprehension

Application

Analysis

Synthesis

Evaluation



Place The Prize

Place each item below into its correct grid location.



9									
8									
7									
6									
5									
4									
3									
2									
1									
	A	В	С	D	E	F	G	н	I





Progress To Analysis





Buried Treasure



Create a series of directions to get from the X to your chosen treasure chest. Use compass directions and co-ordinates in your directions.

Directions to the Treasure



9	X								
8									
7									
6									
5									
4									
3									
2									
1									
	A	В	С	D	E	F	G	н	I





Position - Leve

2

Knowledge



Change The Size

Use the grid to enlarge or reduce each image as appropriate.















Progress To Evaluation



Analysis

Synthesis

Evaluation

Knowledge

Comprehension



Position Discussion

The following questions and activities are provide as a starting point for fun discussions related to Position. During these conversations students will have an opportunity to use appropriate mathematical language in its correct context, to engage in reflection on the Position activities they have completed and to use logical reasoning to tie their in-class mathematics to its everyday context.



Why do we need grid references?



How have maps changed in the past 5 years from book based street directories to Google Maps.



Show students the 3D topological mapping available online such as the ability to drill into Google maps to get a hybrid street view of your current location.



Show students the 3D topological mapping available online such as the ability to drill into Google maps to get a hybrid street view



Demonstrate the ability to scale maps up and down with the +/- on the side of the map and how this relates to the enlargement and reduction activity in the Synthesis section.



Position - Level 2 - Students will represent the position of objects using co-ordinates and directions Comprehension Application Synthesis

Analysis

Evaluat

