‘Introduction to linear graphs’

The Knowledge for Progression:

- To know that a coordinate is in the form (X,Y)
- To know that straight lines are continuous

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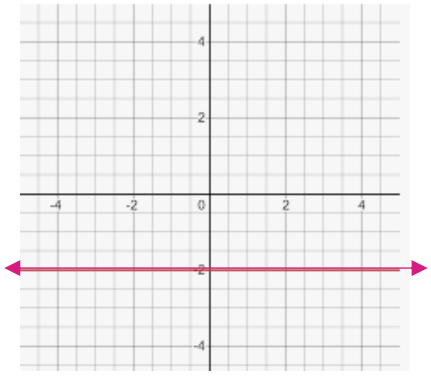
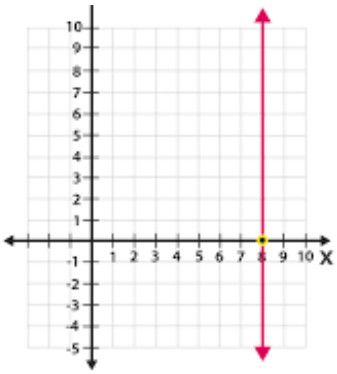
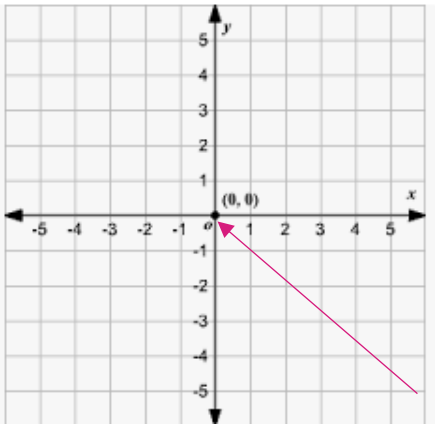
Key Word	Dual Coding	Definition
Horizontal		In a left to right direction. Parallel to the x-axis
Vertical		In a down to up direction. Parallel to the y-axis
Origin		The intersection of the y and x-axis. Taking the coordinate (0,0)

‘Sequences’

The Knowledge for Progression:

- To know that an arithmetic sequence is where the terms increase or decrease by the same number each time.
- To know that “n” is the position of a value in the sequence.
- To know that “n” is always a positive integer.
- To know that a quadratic sequence is linked to square numbers.
- To know that a geometric sequence is where each term is generated by multiplying by a constant amount.
- To know that terms in a triangular sequence are generated by adding consecutive numbers, starting from 1.
- To know that the terms in a Fibonacci sequence are generated by adding the two previous terms.

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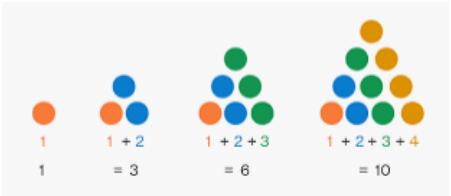
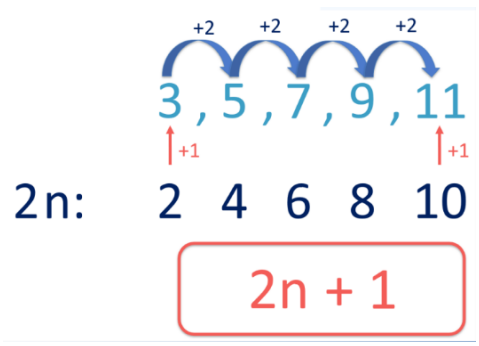
Key Word	Dual Coding	Definition
Sequence	2, 4, 8, 16 …	A set of values or diagrams that follow a pattern
Term	Term: 1 2 3 4  Term: 1 2 3 4 5	The position of a value or diagram in a sequence
Term-to-term rule	2, 4, 8, 16, 32 X2 X2 X2 X2	The way that you obtain the next term of a sequence using the previous term
Arithmetic sequence	3, 7, 11, 15 +4 +4 +4	Terms are generated by adding or subtracting a constant amount. This can also be called an arithmetic progression.
Geometric sequence	3, 12, 48, 194 X4 X4 X4	Terms are generated by multiplying by a constant amount. This can also be called a geometric progression.
Triangular sequence	 	Terms are generated by adding consecutive numbers, starting from 1
Fibonacci sequence	1, 1, 2, 3, 5, 8, 13 + + + + + +	Terms are generated by adding the two previous terms

Nth term		Relates to the rule of a sequence where 'n' represents the position of the term, starting the count of terms from the first term.

'Maps and bearings'

The Knowledge for Progression:

- To know that a bearing is always given in 3 figures
- To know the compass directions
- To know that North is 000
- To know clockwise direction

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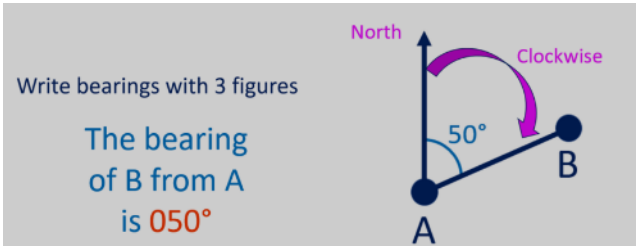
Key Word	Dual Coding	Definition
Bearing		Bearings are angles, measured clockwise from north

‘Surface area of prisms’

The Knowledge for Progression:

- To know that surface area is the sum of the area of the faces of a 3D shape.
- To know that a face is a 2D side that makes up a 3D shape.
- To know that a prism is a 3D shape with a uniform cross section. The cross section is a polygon.
- To know that the uniform cross-section is the polygon that is runs throughout the prism.

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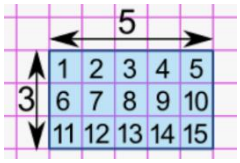
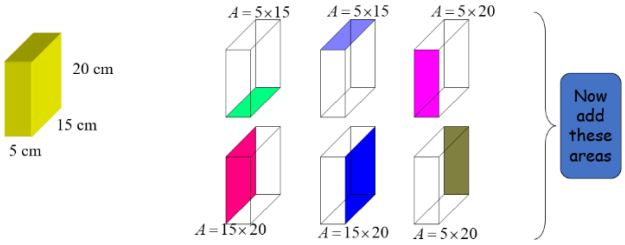
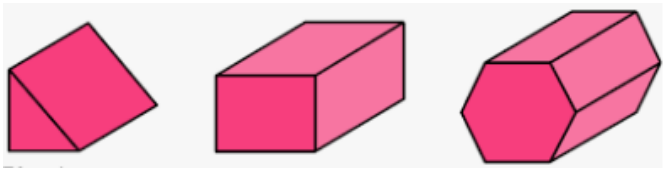
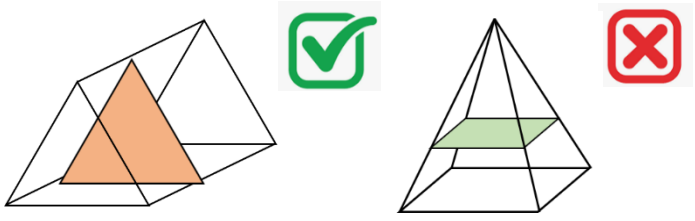
Key Word	Dual Coding	Definition
Area		The space inside a 2D shape
Surface Area		The total area of all the faces of a 3D shape added
Prism		A 3D shape with a uniform cross section. The cross section is a polygon
Uniform cross-section		The **same** face that runs through the length of a 3D shape.

‘Error intervals’

The Knowledge for Progression:

- To know that an error interval is the range of possible values a number could have been before rounding.
- To know that an error interval is written using inequalities.

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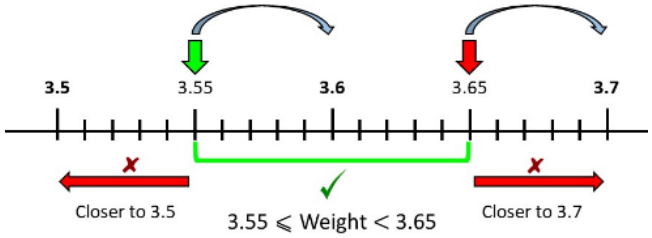
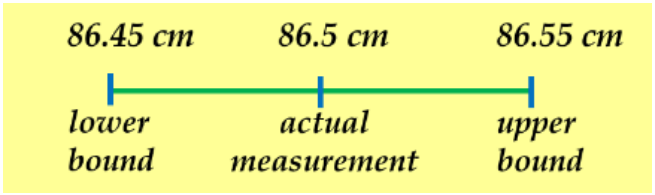
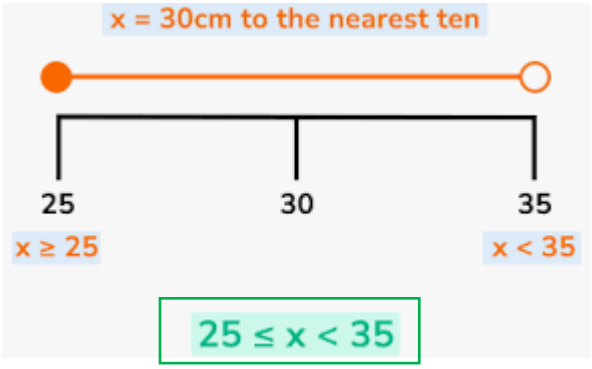
Key Word	Dual Coding	Definition
Limits of accuracy		To describe *all the possible values* that a rounded number could be
Lower bound		The smallest value that would round up *to the estimated value*
Upper bound		The smallest value that would round up to the ***next*** *estimated value*
Error Interval		The *range* of possible values a number could have been before it was rounded. Using the lower and upper bounds