Discovering triangular numbers

Investigation (PAS2.1, NS4.1)

☺ *Model* each triangle with your objects.

☺ *Record* the total *number* of objects used to model each triangle.

☺ *Record* your representations in the table below using *diagrams* and *number sentences*.

Triangular number term	1st	2nd	3rd	4th	5th	6th	7th
Diagram	○	○ ○ ○					
Total number of objects	1	3					
Number sentence	1	1 + 2 = 3					

Explain how you made the next triangle in the pattern.

Describe this number pattern in words.

Predict what the 10th number is in this number pattern, without drawing a diagram.

List at least three *examples* of triangular numbers you have seen in the *real world*.

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