

# Discussion Problems

## Step 2: Right Angles in Shapes

### National Curriculum Objectives:

Mathematics Year 3: (3G4a) [Recognise angles as a property of shape or a description of a turn](#)

Mathematics Year 3: (3G4b) [Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle](#)

### About this resource:

Children will need a peg board and elastic bands or more than one copy of the first question to experiment with different shapes.

This resource has been designed for pupils who understand the concepts within [this step](#). It provides pupils with more opportunities to enhance their reasoning and problem solving skills through more challenging problems. Pupils can work in pairs or small groups to discuss with each other about how best to tackle the problem, as there is often more than one answer or more than one way to work through the problem.

There may be various answers for each problem. Where this is the case, we have provided one example answer to guide discussion.

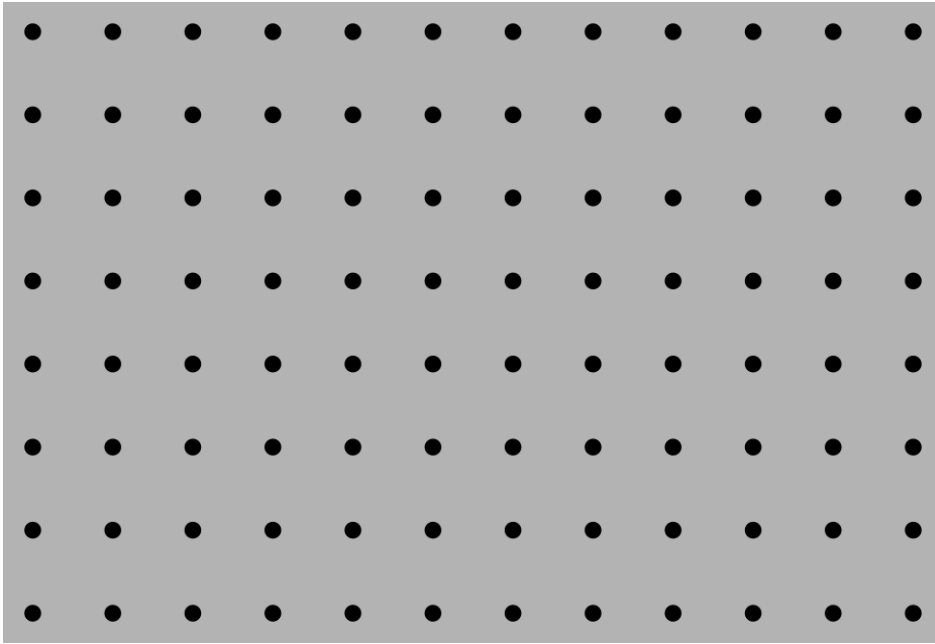
We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

More [Year 3 Properties of Shape](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

# Right Angles in Shapes

1. Design a shape on the peg board using the rules below.



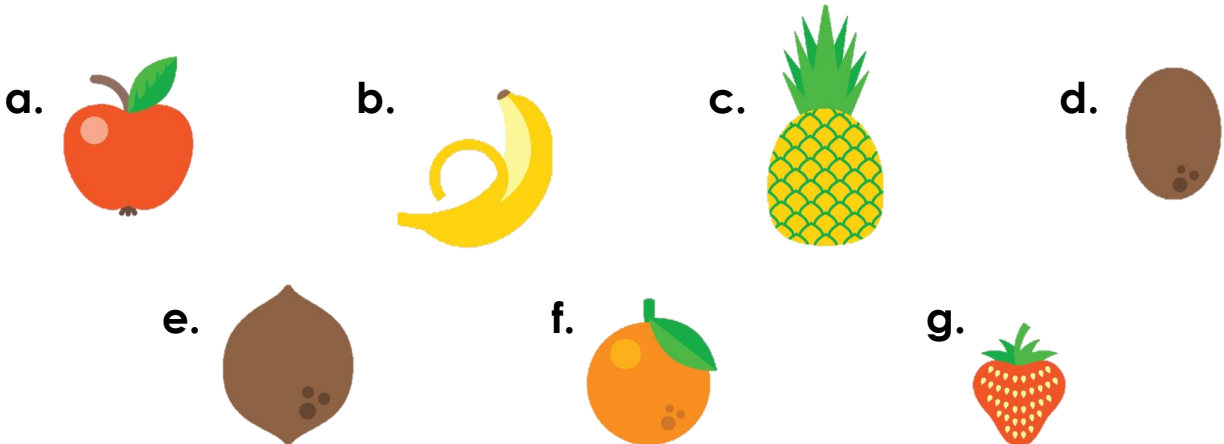
### Rules

The shape has 3 right angles and more than 6 sides.  
The shape includes diagonal lines.

DP

2. Write the names of the fruits below using the capital letters provided.

A	B	C	D	E	F	G	H	I	J	K	L	M
N	O	P	Q	R	S	T	U	V	W	X	Y	Z



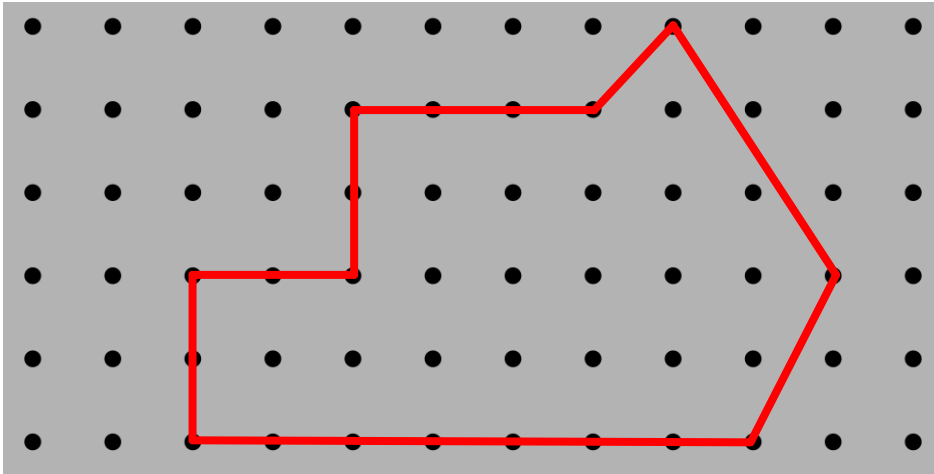
Investigate which fruit has the most right angles within its name and then order them.

DP

## Right Angles in Shapes

1. Design a shape on the peg board using the rules below.

Various possible answers, for example:



### Rules

The shape has 3 right angles and more than 6 sides.  
The shape includes diagonal lines.

DP

2. Write the names of the fruits below using the capital letters provided.

Investigate which fruit has the most right angles within its name and then order them.

- a. APPLE has 5 right angles.
- b. BANANA has 0 right angles.
- c. PINEAPPLE has 9 right angles.
- d. KIWI has 1 right angle.
- e. COCONUT has 2 right angles.
- f. ORANGE has 4 right angles.
- g. STRAWBERRY has 6 right angles.

Various possible orders, for example: ordered from the least number of right angles to the greatest number of right angles (BANANA, KIWI, COCONUT, ORANGE, APPLE, STRAWBERRY AND PINEAPPLE).

DP