Discussion Problems
Step 2: Factors

National Curriculum Objectives:

Mathematics Year 5: (5C5a) Identify multiples and factors, including finding all factor pairs of a number, and common factors of to numbers

About this resource:

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.

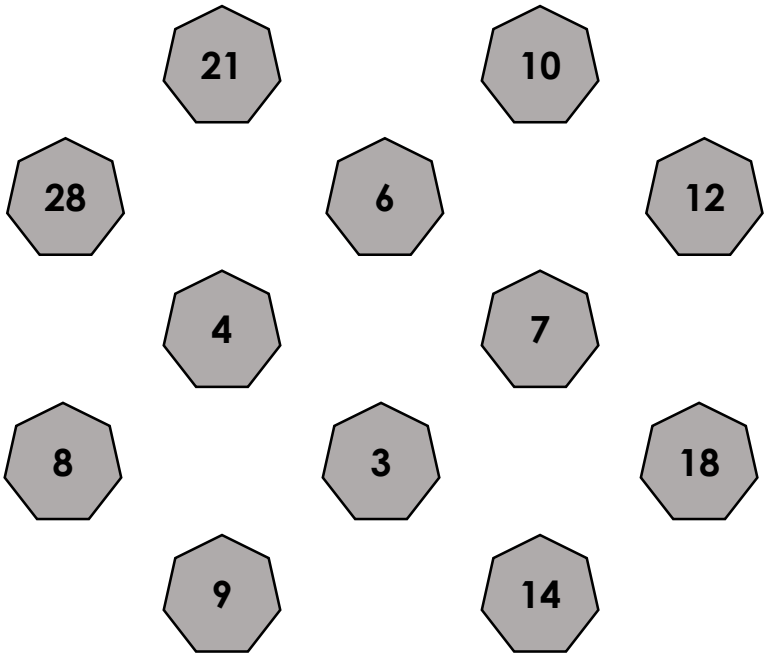
We recommend self or peer marking using the answer page provided to promote discussion and self-correction.

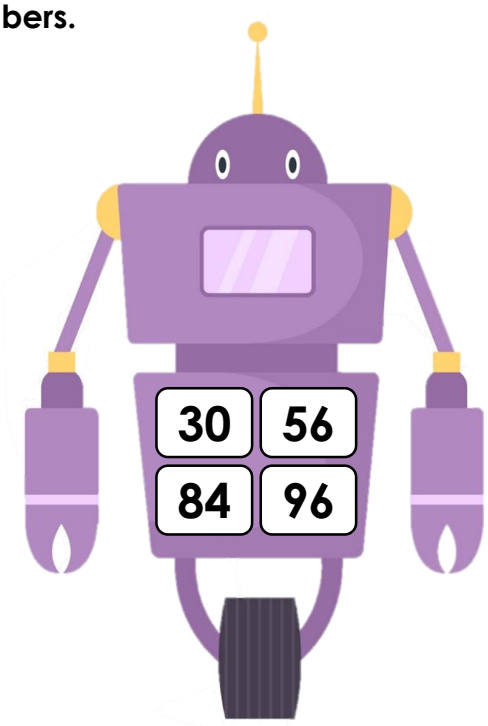
More Year 5 Multiplication and Division resources.

Did you like this resource? Don't forget to review it on our website.

Factors

1. Z the robot is malfunctioning and needs to be repaired! You must use six screws and each screw must be a factor of at least <u>two</u> of his numbers.



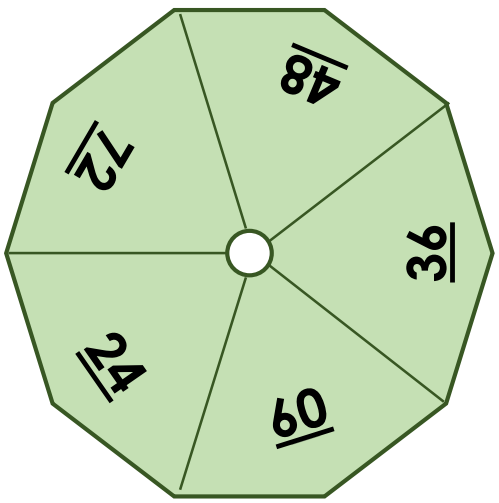


Investigate the screws that could be used to fix Z and place them in ascending order.

DP

2. With a partner, play the game below.

1. Lay the number cards face down and mix them around.
2. Use the spinner provided to choose a target number.
3. Take it in turns to flip two cards over.
4. If the numbers are a factor pair of the target number then the player keeps them.
5. The winner is the player with the most factor pairs



8	6	1	12	2	6	24

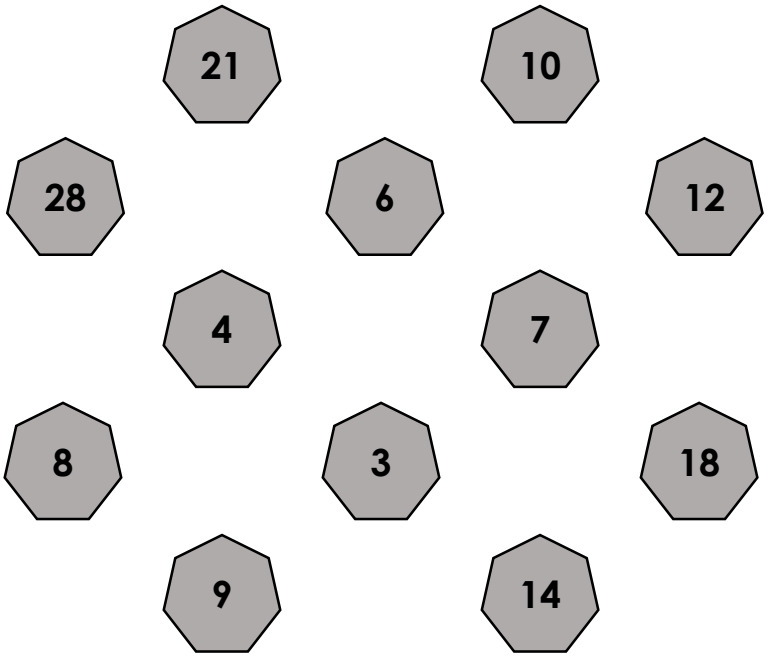
4	16	5	18	9	3	72	36

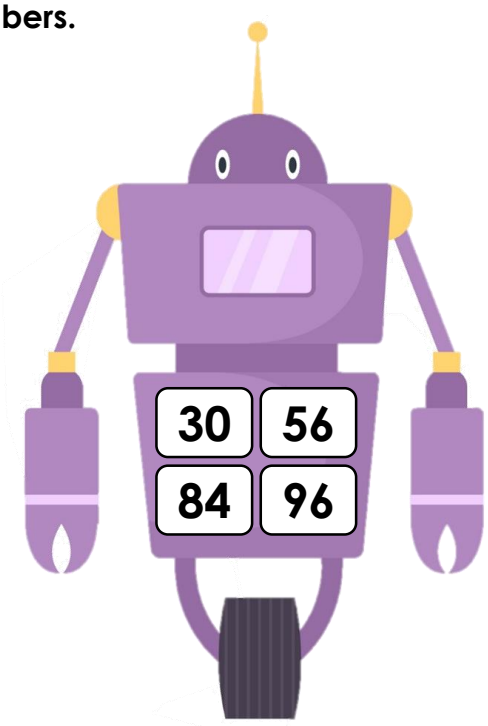
When you have found all of the factor pairs, spin the spinner and play again!

DP

Factors

1. Z the robot is malfunctioning and needs to be repaired! You must use six screws and each screw must be a factor of at least <u>two</u> of his numbers.





Investigate the screws that could be used to fix Z and place them in ascending order.

Various answers, for example: 3, 4, 6, 7, 12, 14.

DP

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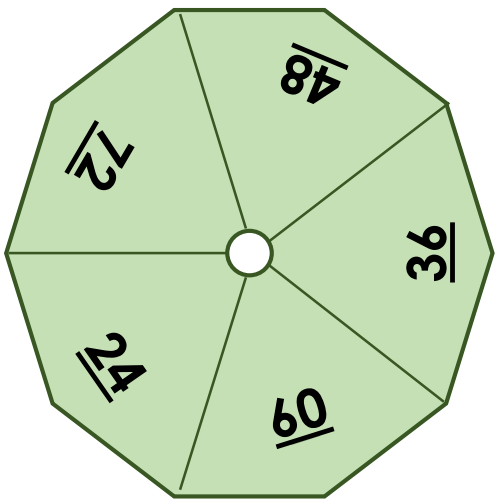

8	6	1	12	2	6	24
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When you have found all of the factor pairs, spin the spinner and play again!

Various answers, for example:

24: 6 x 4; 60: 5 x 12; 72: 4 x 18.

DP