

—Factor Games - Teacher's Notes

- These games are designed to increase children's understanding of factors. It does this by encouraging children to think about the most efficient way to use a number card dealt to them.
- There are three levels available, and the game on the right is the simplest - other games have higher numbers and more of them.
- Children are dealt number cards at random, and each child will be dealt a different one.
- Suppose you were dealt the number, 2 which box is it best to fill in?
- Boxes 10 and 14 have only 3 factors in the set of cards (1, 2 and 5 in the case of 10). Box 12 has 5 factors (1, 2, 3, 4 and 6).
- This suggests that 10 or 14 is a better use of the number since you have more chance of filling 12 with another number.
- The number 1, of course is a factor of every number, and is a prized card.
- Remind children to put all their answers in one game only, until someone wins. In addition, some form of checking or monitoring should be planned for.

<input type="checkbox"/>	is a factor of 10
<input type="checkbox"/>	is a factor of 12
<input type="checkbox"/>	is a factor of 14
<input type="checkbox"/>	is a factor of 16
<input type="checkbox"/>	is a factor of 18

Teacher-led version

- This game can be played with a group or whole class, with the teacher calling out the numbers and everyone filling in their own box.

—Factor Game - I

This is a game for two to nine players.
You need one set of 1 - 9 cards (no zero) and a copy of this sheet for each player.

Rules

- The cards are shuffled and each player is dealt a card.
- Each player tries to complete a row in Game 1.
- Here is an example with the card number 8.

8 is a factor of 16

- Any number which cannot be used is added to the reject boxes.
- The cards are shuffled and dealt again.
- The winner is the first person to complete a game.

Game 1

- is a factor of 10
- is a factor of 12
- is a factor of 14
- is a factor of 16
- is a factor of 18

Game 3

- is a factor of 10
- is a factor of 12
- is a factor of 14
- is a factor of 16
- is a factor of 18

Game 2

- is a factor of 10
- is a factor of 12
- is a factor of 14
- is a factor of 16
- is a factor of 18

Game 4

- is a factor of 10
- is a factor of 12
- is a factor of 14
- is a factor of 16
- is a factor of 18

Rejected Numbers

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—Factor Game - 2—

This is a game for two to nine players.
You need one set of 1 - 9 cards (no zero)
and a copy of this sheet for each player.

Rules

- The cards are shuffled and each player is dealt a card.
- Each player tries to complete a row in Game 1.
- Here is an example with the number 8.

8 is a factor of 24

- Any number which cannot be used is put in the reject boxes.
- The cards are shuffled and dealt again.
- The winner is the first person to complete a game.

Game 1

is a factor of 10
 is a factor of 12
 is a factor of 15
 is a factor of 20
 is a factor of 24
 is a factor of 28
 is a factor of 30
 is a factor of 36

Game 2

is a factor of 10
 is a factor of 12
 is a factor of 15
 is a factor of 20
 is a factor of 24
 is a factor of 28
 is a factor of 30
 is a factor of 36

Game 3

is a factor of 10
 is a factor of 12
 is a factor of 15
 is a factor of 20
 is a factor of 24
 is a factor of 28
 is a factor of 30
 is a factor of 36

Rejected Numbers

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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—Factor Game - 3

This is a game for two to nine players.
You need one set of 1 - 9 cards (no zero)
and a copy of this sheet for each player.

Rules

- The cards are shuffled and each player is dealt a card.
- Each player tries to complete a row.
- Here is an example with the number 8.

8 is a factor of 24

- Any number which cannot be used is put in the reject boxes.
- The cards are shuffled and dealt again.
- The winner is the first person to complete a game.

Game 1

is a factor of 10
 is a factor of 12
 is a factor of 15
 is a factor of 20
 is a factor of 24
 is a factor of 35
 is a factor of 36
 is a factor of 40
 is a factor of 48
 is a factor of 49
 is a factor of 60

Game 2

is a factor of 10
 is a factor of 12
 is a factor of 15
 is a factor of 20
 is a factor of 24
 is a factor of 35
 is a factor of 36
 is a factor of 40
 is a factor of 48
 is a factor of 49
 is a factor of 60

Game 3

is a factor of 10
 is a factor of 12
 is a factor of 15
 is a factor of 20
 is a factor of 24
 is a factor of 35
 is a factor of 36
 is a factor of 40
 is a factor of 48
 is a factor of 49
 is a factor of 60

Rejected Numbers

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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