

GARDEN BEDS

Picture Puzzles

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This Picture Puzzle is based on

... Task 147, Garden Beds

Teaching Notes

... mathematicscentre.com/picturepuzzles/access/index.htm

Picture Puzzles

To Do

1. Find your own way to connect plants and tiles.
2. Explain other ways to connect plants and tiles.
3. Calculate using your own way and other ways.

You Need

- Square tiles or cube blocks in 2 colours
- Square graph paper

Picture Puzzles

 Plant

Picture Puzzles

 Plant

 Tile

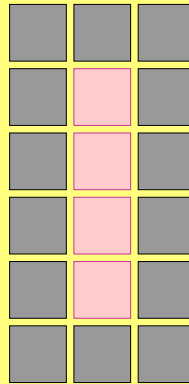
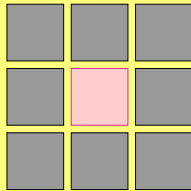
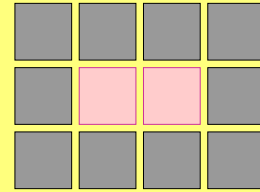
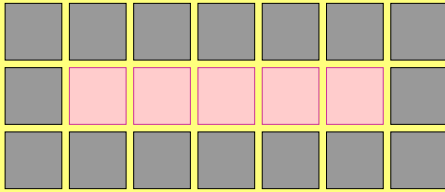
Picture
Puzzles

Picture Puzzles

Plant

Tile

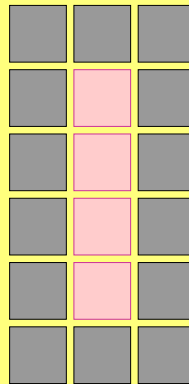
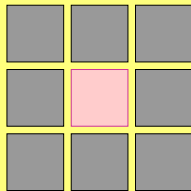
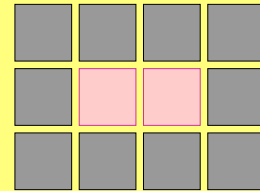
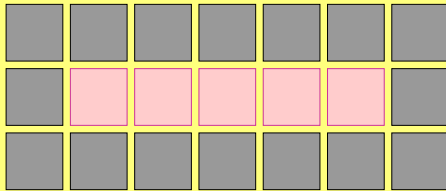
Garden beds with a tile border.



Picture Puzzles



Garden beds with a tile border.



Make your own
garden bed like
these.

**If I tell you any number of plants (P)
can you tell me how to calculate the
number of tiles (T) in the border?**

**Explain in your journal and calculate
the number of tiles for 100 plants.**

Picture
Puzzles

more

Picture
Puzzles

Picture Puzzles

Rashida sees it like this

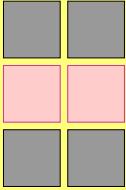
Picture Puzzles

Rashida sees it like this



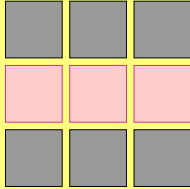
Picture Puzzles

Rashida sees it like this



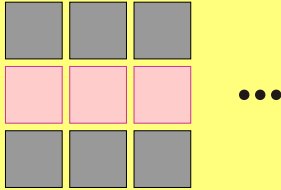
Picture Puzzles

Rashida sees it like this



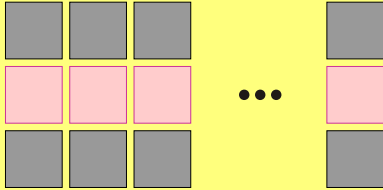
Picture Puzzles

Rashida sees it like this



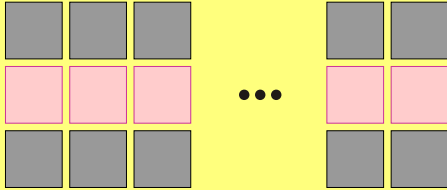
Picture Puzzles

Rashida sees it like this



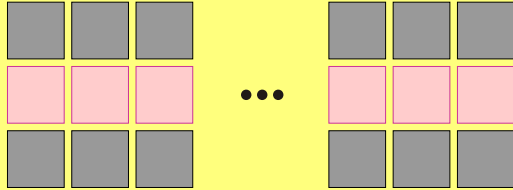
Picture Puzzles

Rashida sees it like this



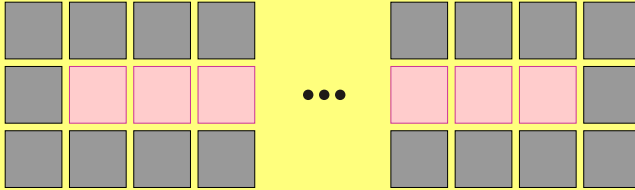
Picture Puzzles

Rashida sees it like this



Picture Puzzles

Rashida sees it like this



**Explain Rashida's way and use it to
calculate the number of tiles
for 81 plants.**

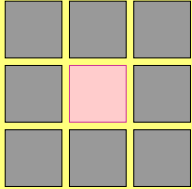
**Investigate using Rashida's way to
calculate the number of plants
if she only has 40 tiles.**

Picture Puzzles

Steven sees it like this

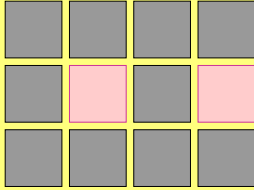
Picture Puzzles

Steven sees it like this



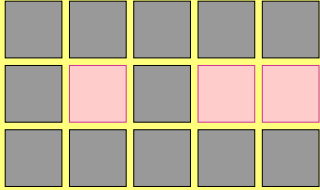
Picture Puzzles

Steven sees it like this



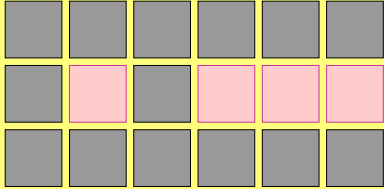
Picture Puzzles

Steven sees it like this



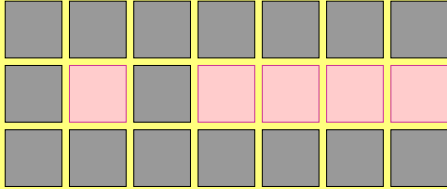
Picture Puzzles

Steven sees it like this



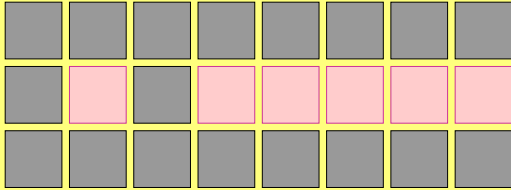
Picture Puzzles

Steven sees it like this



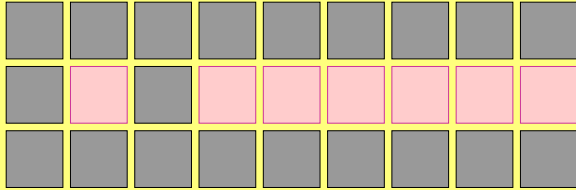
Picture Puzzles

Steven sees it like this



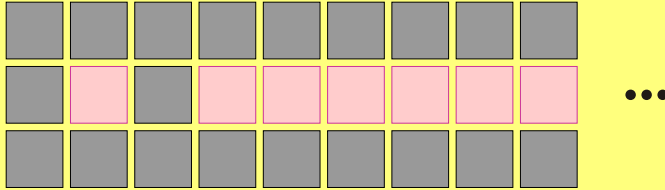
Picture Puzzles

Steven sees it like this



Picture Puzzles

Steven sees it like this

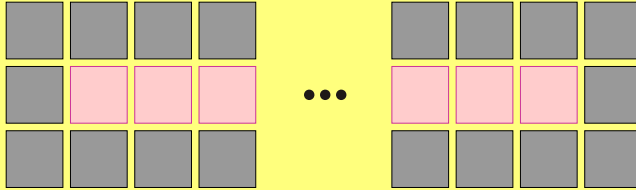


**Explain Steven's way and use it to
calculate the number of tiles
for 102 plants.**

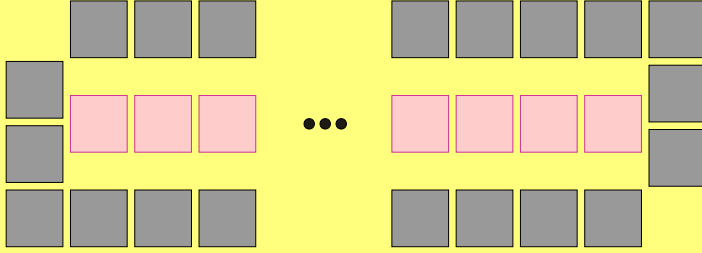
Investigate using Steven's way to
calculate the number of plants
if he only has 30 tiles.

Picture Puzzles

Irene sees it like this



Picture Puzzles

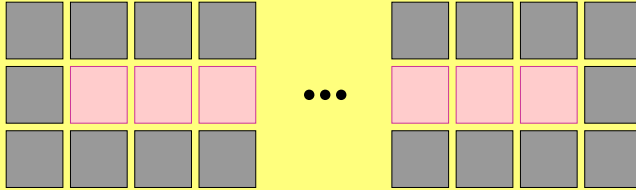


**Explain Irene's way and use it to
calculate the number of tiles
for 54 plants.**

Investigate using Irene's way to
calculate the number of plants
if she only has 110 tiles.

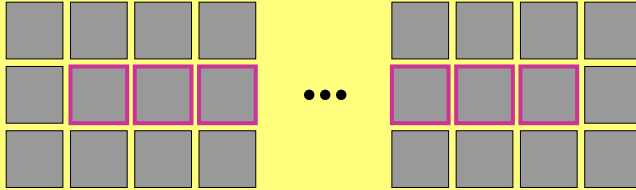
Picture Puzzles

Another way to see it is...



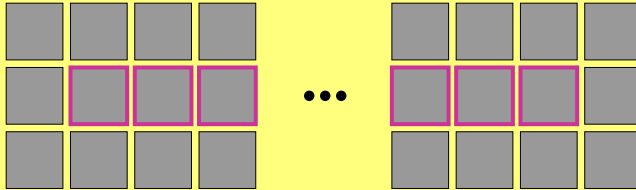
Picture Puzzles

...like Geoffrey who imagines this



Picture Puzzles

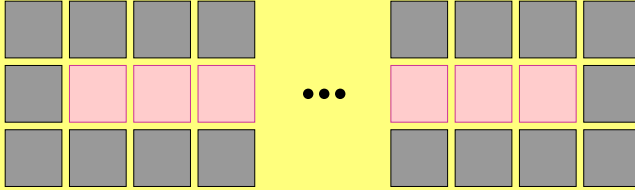
...like Geoffrey who imagines this



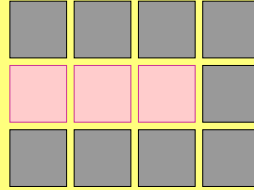
Where are the plants?

Picture Puzzles

Surprise!



...



**Explain Geoffrey's way and use it to
calculate the number of tiles
for 67 plants.**

Investigate using Geoffrey's way to
calculate the number of plants
if he only has 60 tiles.

Picture Puzzles

THE END...

...OR IS IT?

Picture
Puzzles