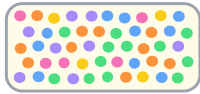


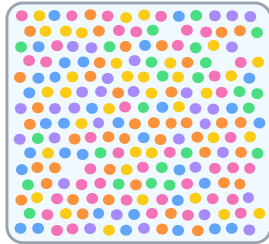
Estimate with a Referent

Use the box of 50 dots. Circle the best estimate.

1.



50 dots



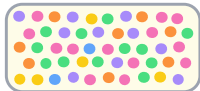
Example

About how many?

100 **200** 500

about 4 boxes of 50

2.



50 dots



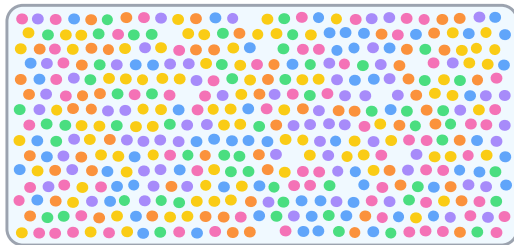
About how many?

100 300 600

3.



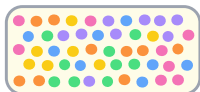
50 dots



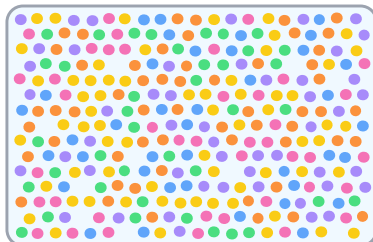
About how many?

100 200 400

4.



50 dots



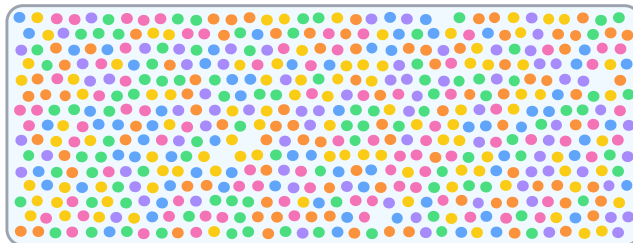
About how many?

100 300 800

5.



50 dots



About how many?

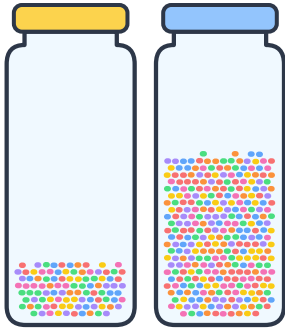
200 500 900

Estimate with a Referent

Use what you know about each jar. Circle the best estimate.

1. 100 beans ? beans

Example

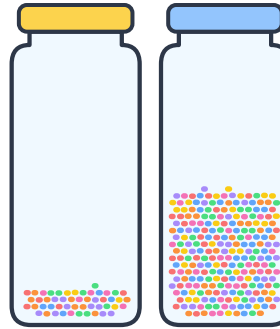


The jars are the same. About how many beans are in the second jar?

3 jars of 100

100 **300** 700

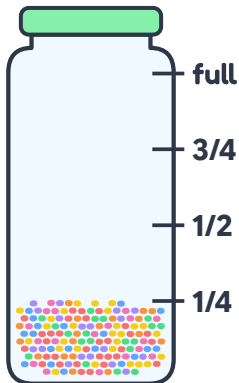
2. 50 beans ? beans



The jars are the same. About how many beans are in the second jar?

250 500 800

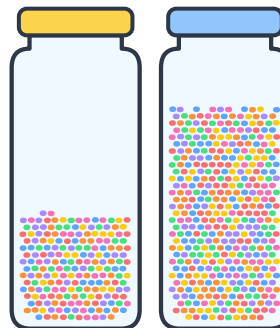
3.



This jar is filled to the $\frac{1}{4}$ mark with 150 beans. About how many beans fill the whole jar?

150 300 600

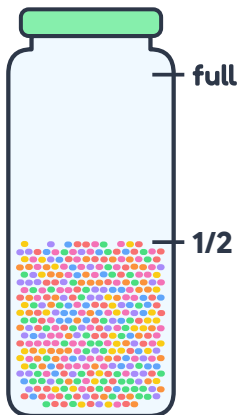
4. 200 beans ? beans



The jars are the same. About how many beans are in the second jar?

200 400 800

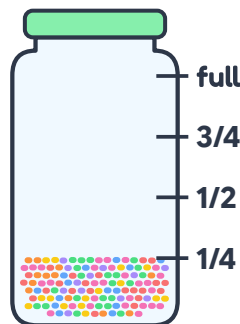
5.



This jar is filled to the $\frac{1}{2}$ mark with 350 beans. About how many beans fill the whole jar?

100 300 700

6.



This jar is filled to the $\frac{1}{4}$ mark with 125 beans. About how many beans fill the whole jar?

125 250 500

Estimate with a Referent

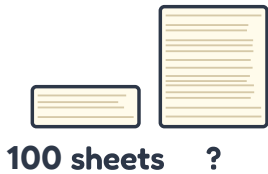
Use the part you know. Circle the best estimate.

1.

Example

This stack has 100 sheets.

About how many sheets in the tall stack?



about 3 stacks of 100

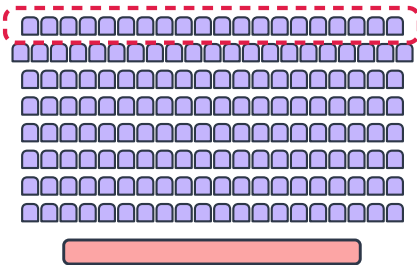
100 **300** 800

2. The top shelf has about 30 books.
About how many books in all?



50 150 500

3. The front row has 20 seats.
About how many seats in all?



40 160 500

4.

This stack has 100 sheets.

About how many sheets in the tall stack?



100 sheets ?

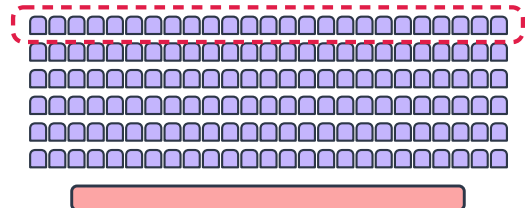
200 400 700

5. The top shelf has about 30 books.
About how many books in all?



90 300 600

6. The front row has 25 seats.
About how many seats in all?

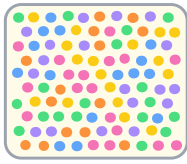


150 400 900

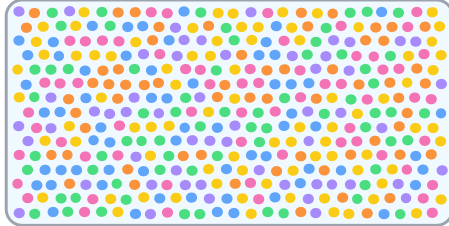
Estimate with a Referent

Use the box to help. Write your estimate.

1.



100 dots



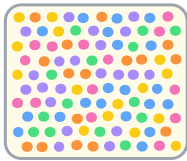
Example

About how many?

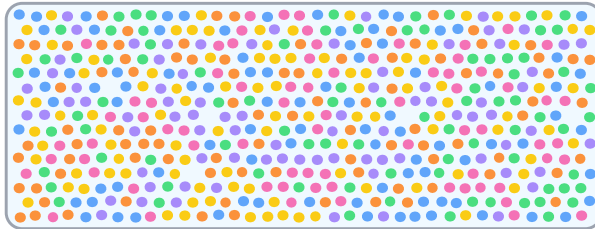
about 400
300 to 500 is fine

Kai says about 100 dots. too low about right too high

2.



100 dots

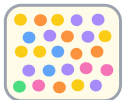


About how many?

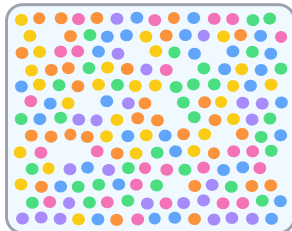
about _____

Ava says about 900 dots. too low about right too high

3.



25 dots



About how many?

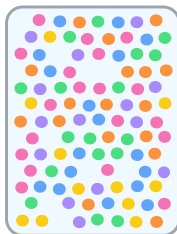
about _____

Ben says about 150 dots. too low about right too high

4.



25 dots



About how many?

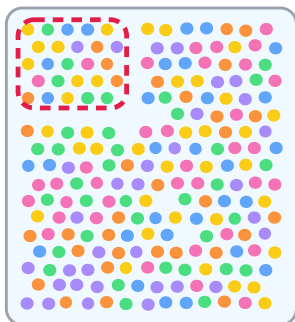
about _____

Zoe says about 40 dots. too low about right too high

Estimate with a Referent

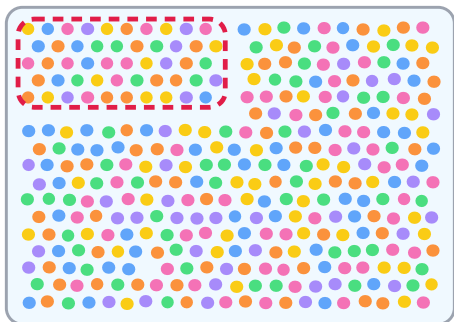
One group is looped. Use it to estimate.

1.



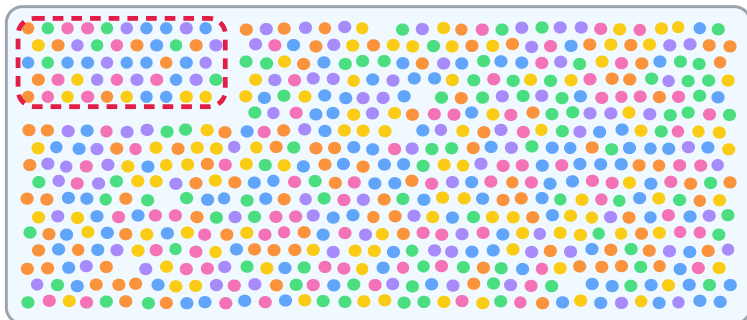
The loop has 25 dots.

2.



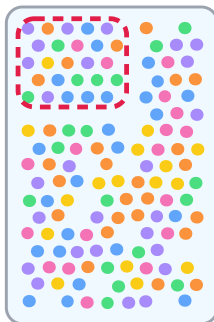
The loop has 50 dots.

3.



The loop has 50 dots.

4.



The loop has 25 dots.

Example

About how many groups of 25?

8

So about how many dots?

200

175 to 225 is fine

About how many groups of 50?

So about how many dots?

About how many groups of 50?

So about how many dots?

About how many groups of 25?

So about how many dots?

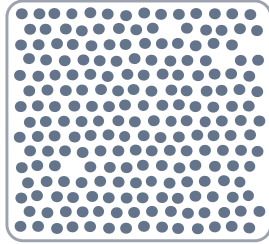
Estimate with a Referent

Use the box of 50 dots. Circle the best estimate.

1.



50 dots



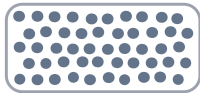
Example

About how many?

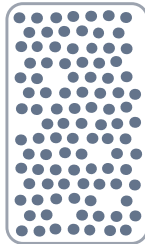
100 **200** 500

about 4 boxes of 50

2.



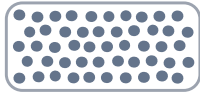
50 dots



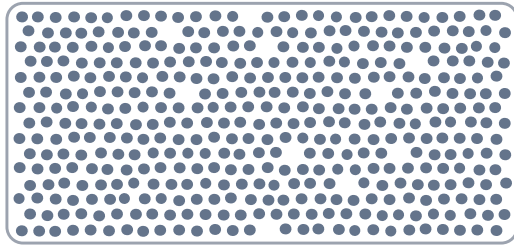
About how many?

100 300 600

3.



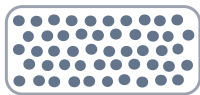
50 dots



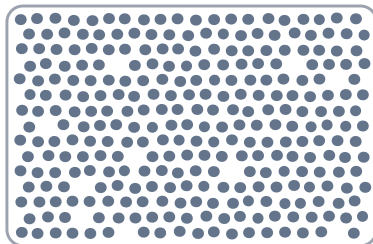
About how many?

100 200 400

4.



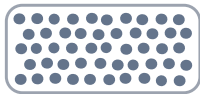
50 dots



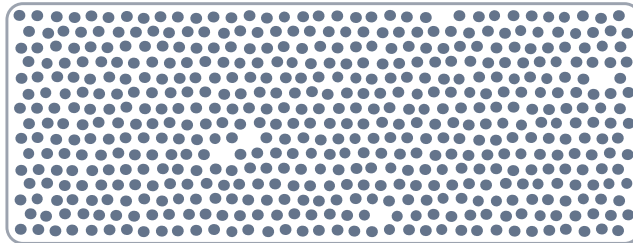
About how many?

100 300 800

5.



50 dots



About how many?

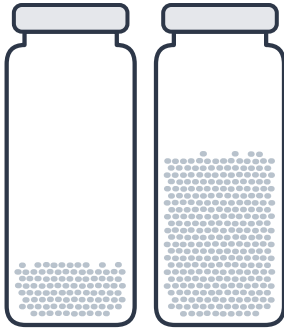
200 500 900

Estimate with a Referent

Use what you know about each jar. Circle the best estimate.

1. 100 beans ? beans

Example

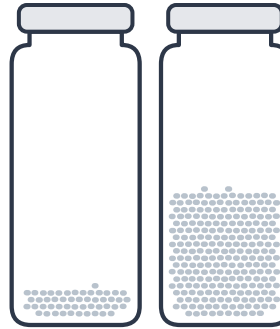


The jars are the same. About how many beans are in the second jar?

3 jars of 100

100 **300** 700

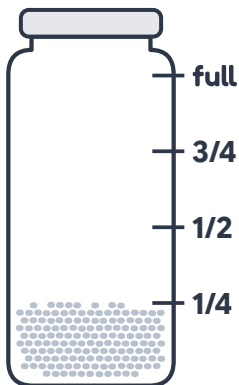
2. 50 beans ? beans



The jars are the same. About how many beans are in the second jar?

250 **500** 800

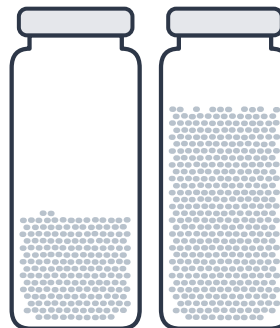
3.



This jar is filled to the $\frac{1}{4}$ mark with 150 beans. About how many beans fill the whole jar?

150 **300** 600

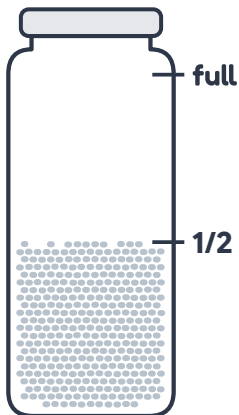
4. 200 beans ? beans



The jars are the same. About how many beans are in the second jar?

200 **400** 800

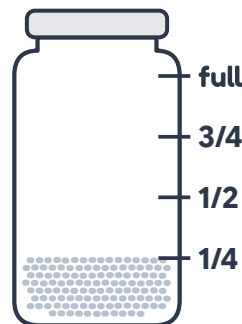
5.



This jar is filled to the $\frac{1}{2}$ mark with 350 beans. About how many beans fill the whole jar?

100 **300** 700

6.



This jar is filled to the $\frac{1}{4}$ mark with 125 beans. About how many beans fill the whole jar?

125 **250** 500

Estimate with a Referent

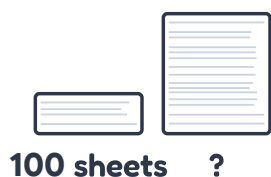
Use the part you know. Circle the best estimate.

1.

Example

This stack has 100 sheets.

About how many sheets in the tall stack?



about 3 stacks of 100

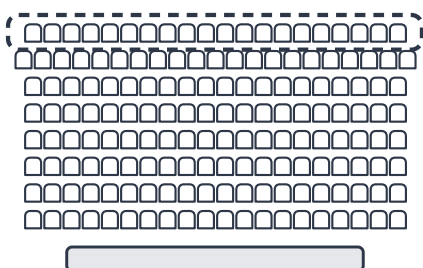
100 **300** 800

2. The top shelf has about 30 books.
About how many books in all?



50 150 500

3. The front row has 20 seats.
About how many seats in all?



40 160 500

4.

This stack has 100 sheets.

About how many sheets in the tall stack?



100 sheets ?

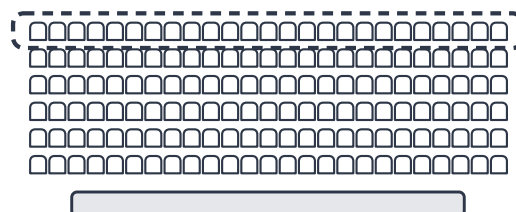
200 400 700

5. The top shelf has about 30 books.
About how many books in all?



90 300 600

6. The front row has 25 seats.
About how many seats in all?

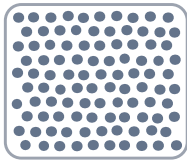


150 400 900

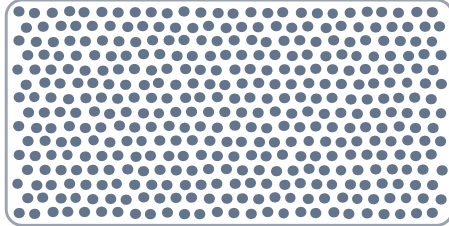
Estimate with a Referent

Use the box to help. Write your estimate.

1.



100 dots



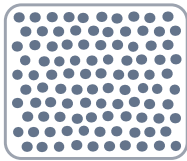
Example

About how many?

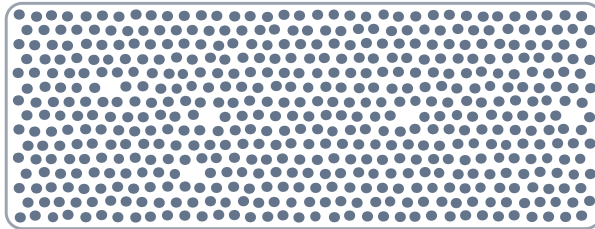
about 400
300 to 500 is fine

Kai says about 100 dots. too low about right too high

2.



100 dots



About how many?

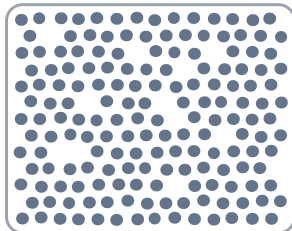
about _____

Ava says about 900 dots. too low about right too high

3.



25 dots



About how many?

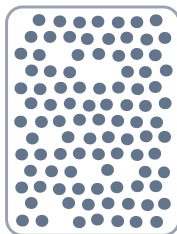
about _____

Ben says about 150 dots. too low about right too high

4.



25 dots



About how many?

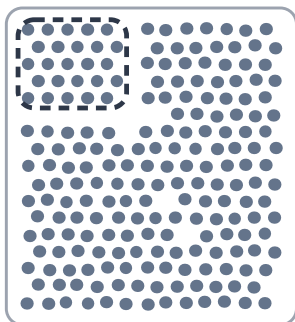
about _____

Zoe says about 40 dots. too low about right too high

Estimate with a Referent

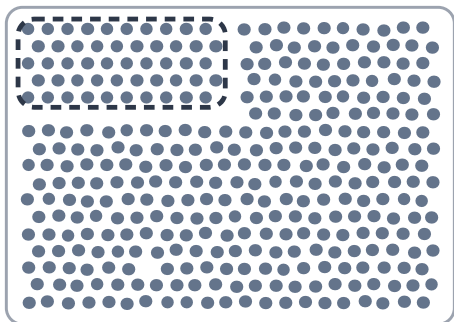
One group is looped. Use it to estimate.

1.



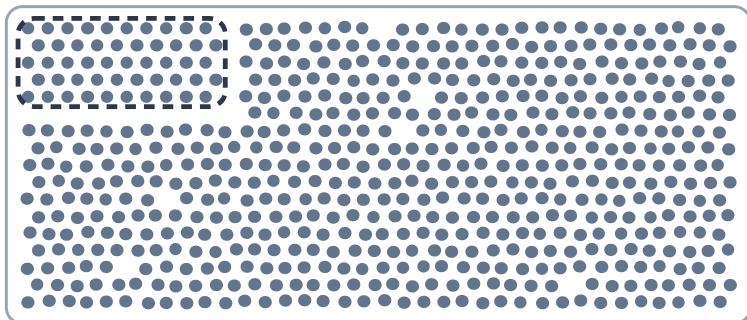
The loop has 25 dots.

2.



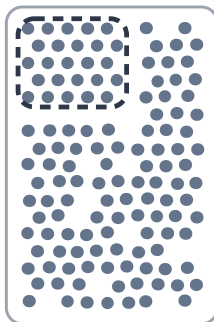
The loop has 50 dots.

3.



The loop has 50 dots.

4.



The loop has 25 dots.

Example

About how many groups of 25?

8

So about how many dots?

200

175 to 225 is fine

About how many groups of 50?

So about how many dots?

About how many groups of 50?

So about how many dots?

About how many groups of 25?

So about how many dots?

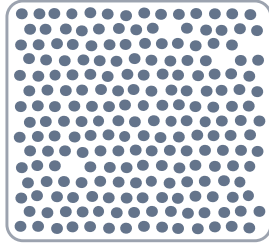
Estimate with a Referent

Use the box of 50 dots. Circle the best estimate.

1.



50 dots



Example

About how many?

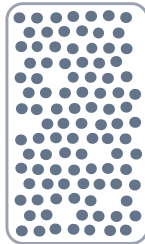
100 **200** 500

about 4 boxes of 50

2.



50 dots

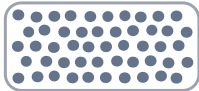


About how many?

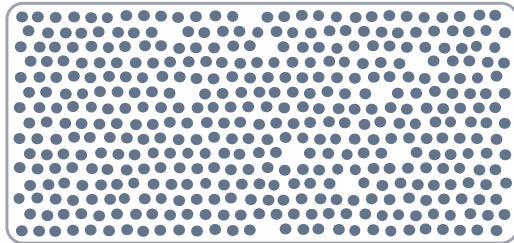
100 300 600

about 2 boxes of 50

3.



50 dots

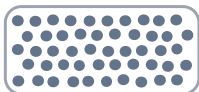


About how many?

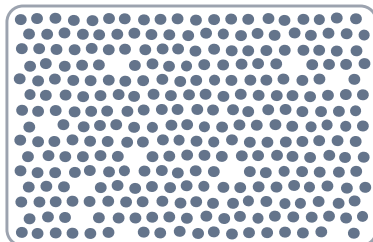
100 200 **400**

about 8 boxes of 50

4.



50 dots

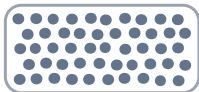


About how many?

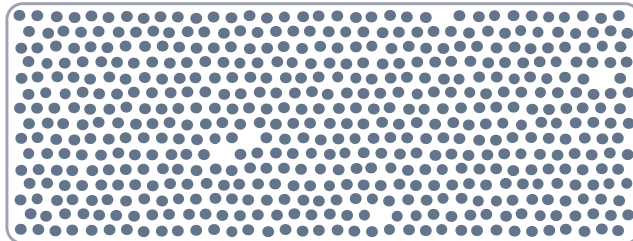
100 **300** 800

about 6 boxes of 50

5.



50 dots



About how many?

200 **500** 900

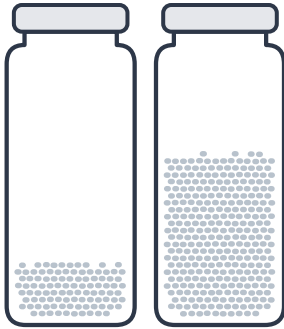
about 10 boxes of 50

Estimate with a Referent

Use what you know about each jar. Circle the best estimate.

1. 100 beans ? beans

Example

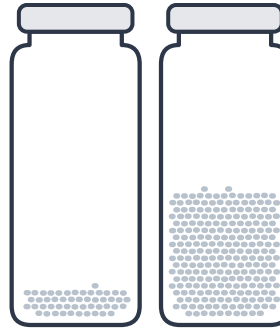


The jars are the same. About how many beans are in the second jar?

3 jars of 100

100 **300** 700

2. 50 beans ? beans

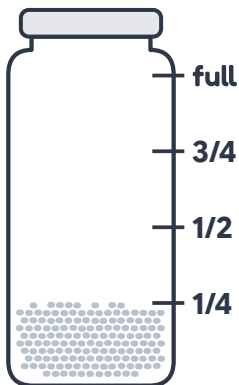


The jars are the same. About how many beans are in the second jar?

5 jars of 50

250 500 800

3.

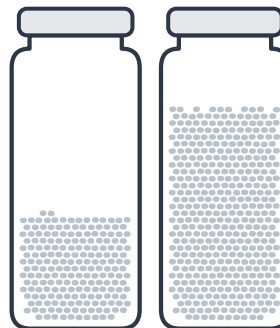


This jar is filled to the $\frac{1}{4}$ mark with 150 beans. About how many beans fill the whole jar?

$4 \times 150 = 600$

150 300 **600**

4. 200 beans ? beans

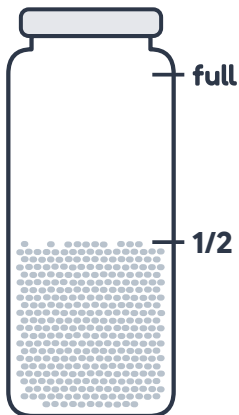


The jars are the same. About how many beans are in the second jar?

2 jars of 200

200 **400** 800

5.

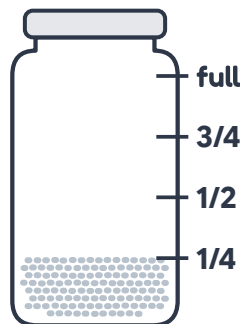


This jar is filled to the $\frac{1}{2}$ mark with 350 beans. About how many beans fill the whole jar?

$2 \times 350 = 700$

100 300 **700**

6.



This jar is filled to the $\frac{1}{4}$ mark with 125 beans. About how many beans fill the whole jar?

$4 \times 125 = 500$

125 250 **500**

Estimate with a Referent

Use the part you know. Circle the best estimate.

1.

Example

This stack has 100 sheets.

About how many sheets in the tall stack?



about 3 stacks of 100

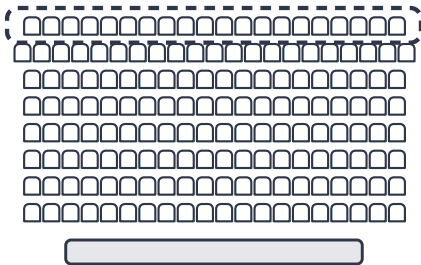
100 **300** 800

2. The top shelf has about 30 books.
About how many books in all?



5 shelves of about 30 50 **150** 500

3. The front row has 20 seats.
About how many seats in all?



8 rows of about 20 40 **160** 500

4.

This stack has 100 sheets.

About how many sheets in the tall stack?



100 sheets ?

about 7 stacks of 100

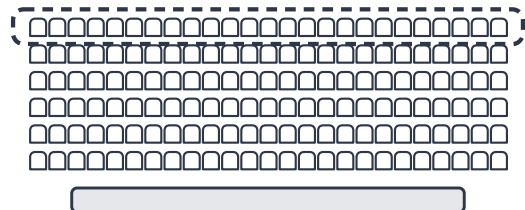
200 400 **700**

5. The top shelf has about 30 books.
About how many books in all?



3 shelves of about 30 **90** 300 600

6. The front row has 25 seats.
About how many seats in all?

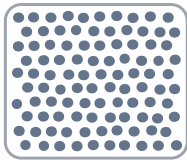


6 rows of about 25 **150** 400 900

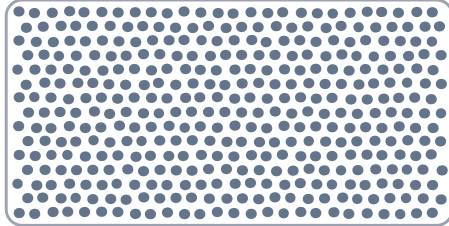
Estimate with a Referent

Use the box to help. Write your estimate.

1.



100 dots



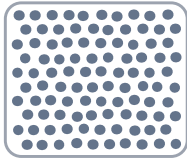
Example

About how many?

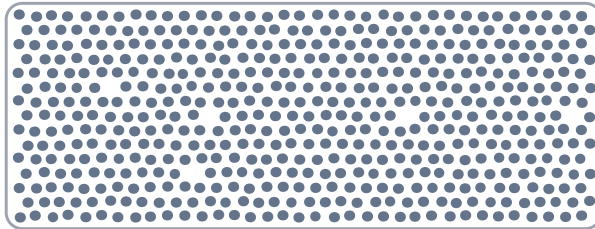
about 400
300 to 500 is fine

Kai says about 100 dots. too low about right too high

2.



100 dots



About how many?

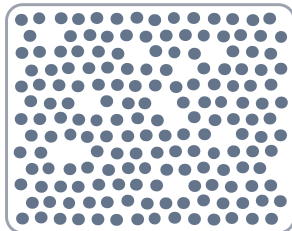
about 500
400 to 600 is fine

Ava says about 900 dots. too low about right too high

3.



25 dots



About how many?

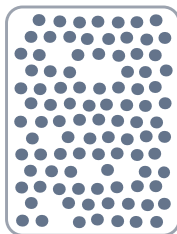
about 175
150 to 200 is fine

Ben says about 150 dots. too low about right too high

4.



25 dots



About how many?

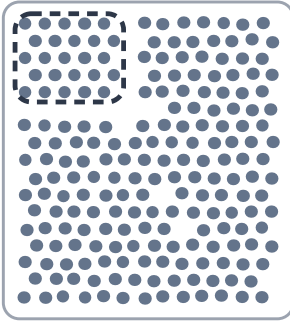
about 100
75 to 125 is fine

Zoe says about 40 dots. too low about right too high

Estimate with a Referent

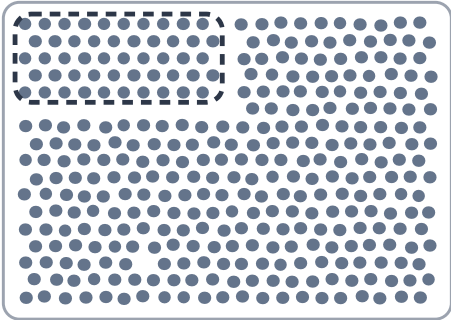
One group is looped. Use it to estimate.

1.



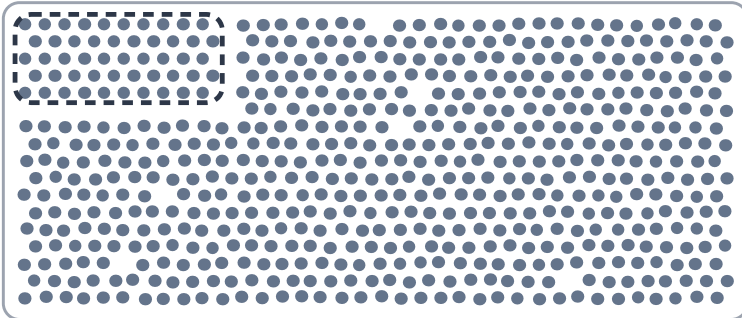
The loop has 25 dots.

2.



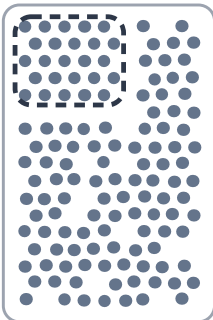
The loop has 50 dots.

3.



The loop has 50 dots.

4.



The loop has 25 dots.

Example

About how many groups of 25?

8

So about how many dots?

200

175 to 225 is fine

About how many groups of 50?

7

So about how many dots?

350

300 to 400 is fine

About how many groups of 50?

12

So about how many dots?

600

550 to 650 is fine

About how many groups of 25?

5

So about how many dots?

125

100 to 150 is fine