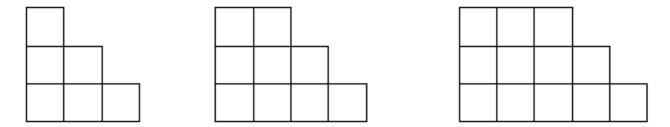
Patterns

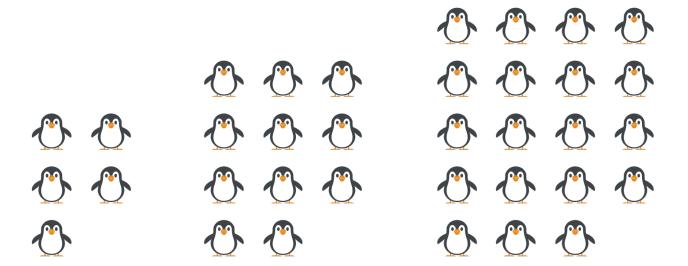


The pictures above show the first three steps of a growing pattern of boxes.

- 1) Describe how the pattern is growing.
- 2) Sketch the 4th and 5th steps in the pattern.
- 3) How many squares would you need for the 10th step? 20th step? *n*th step?
- 4) What step would have 120 squares?
- 5) Draw a graph that shows the number of boxes needed for each step..



Menu Question



***1) The pictures above show the first three steps of a growing pattern of penguins.

- a) Describe how the pattern is growing.
- b) Sketch the 4th and 5th steps in the pattern.
- c) How many penguins would you need for the 10th step? 20th step? nth step?
- d) What step would have 239 penguins?
- e) Ernie claims that the number of penguins will always be odd. Bert disagrees. Who is correct? How do you know?

