



The Geometry of Letters

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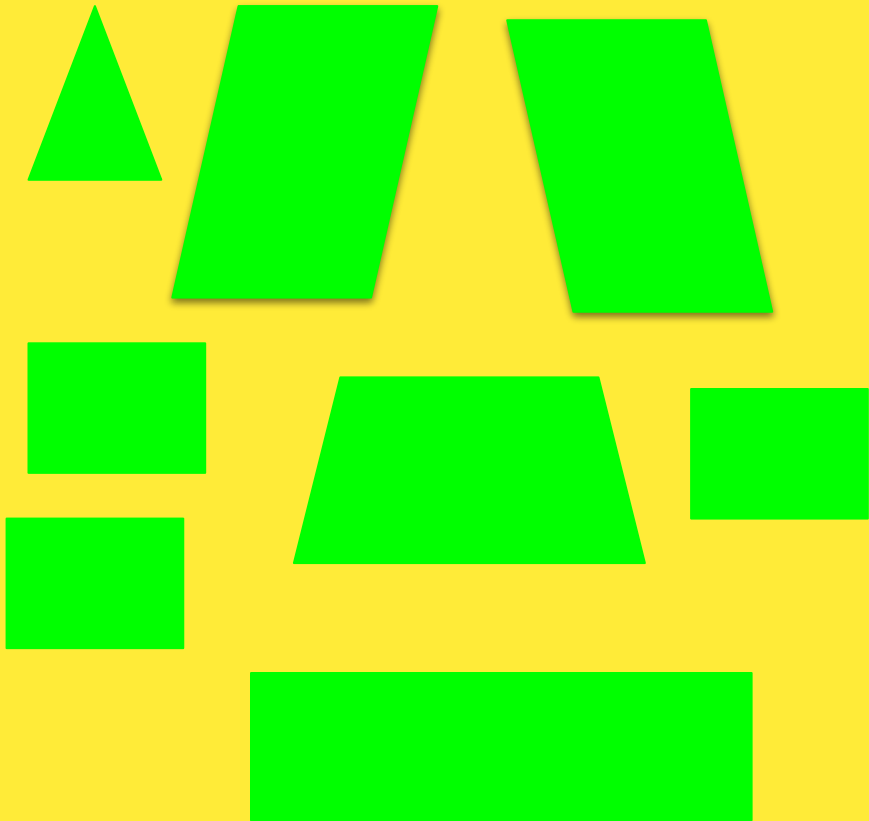
Young children learn letters, sounds, and numbers in much the same way--both as a symbol and an experience. Come and explore ways in which children can connect shape, space, sound, and symbol across mathematics and reading in a fun and engaging way.

Today's letter is the letter A

The letter A has sounds like
"a" in apple
"a" in ant
and
"a" in angry



Use the shapes to make the letter A



Level 1



Important Actions:

Choose

Remove

Build



Which shapes
did you use?

What sounds
does the letter
Aa make?

Triangle

Circle

Rectangle

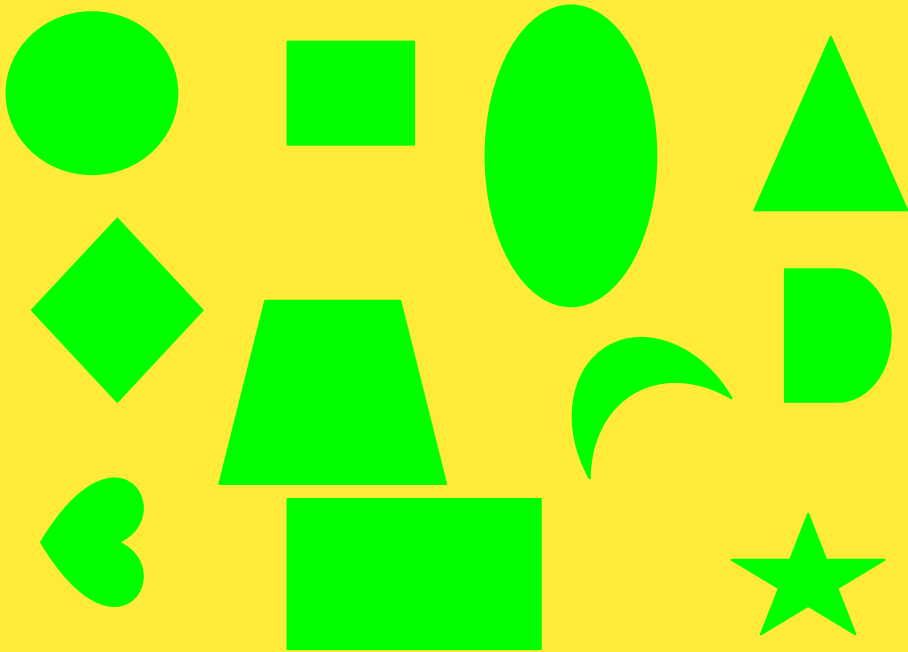
Trapezoid

Parallelogram

Square

Rhombus

What shapes should
we use to make the
letter B?



Level 2



Important Actions:

Choose

Remove

Build



Make the letter B
with the shapes
you chose



Use the shapes to make the letter b



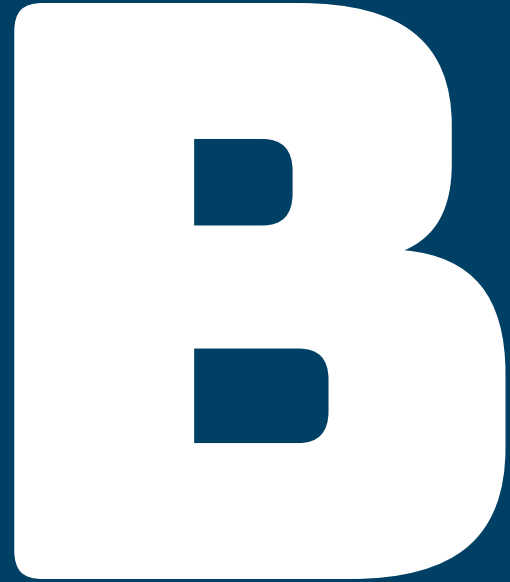
Make the letter B
with the shapes
you chose



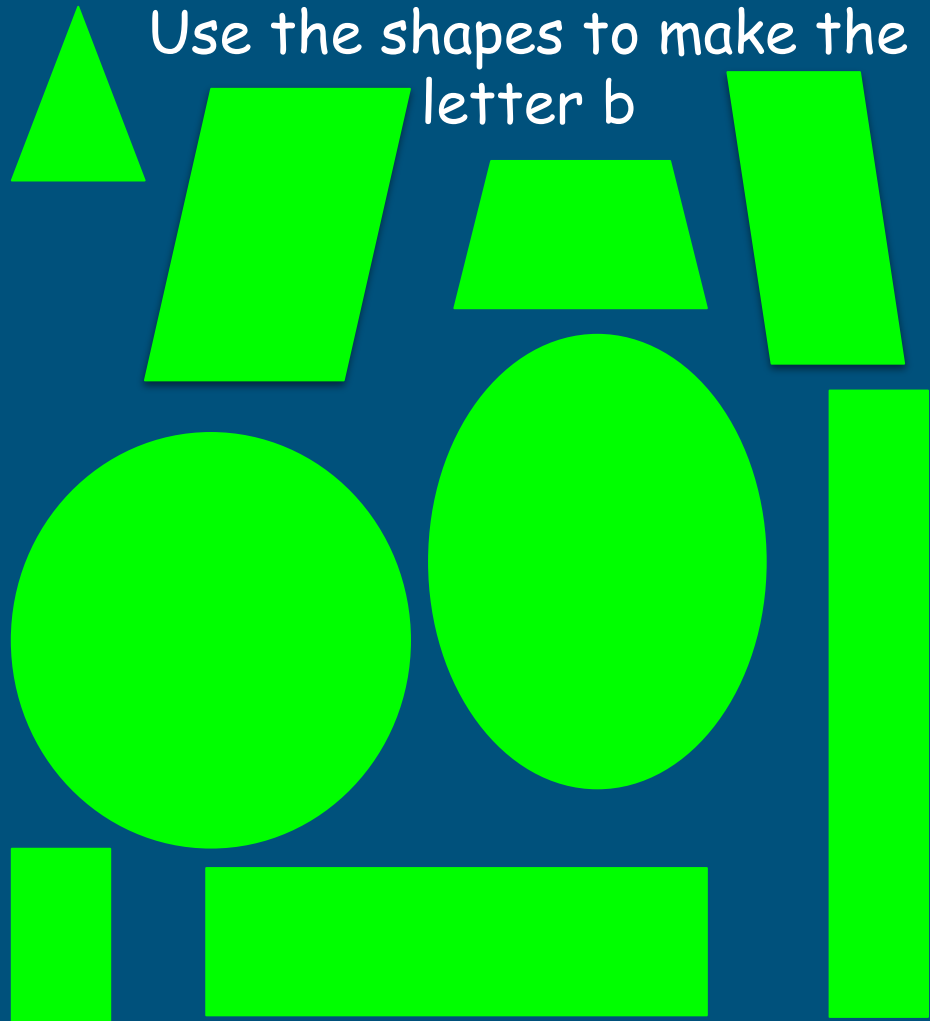
Use the shapes to make the letter b



Make the letter B
with the shapes
you chose



Use the shapes to make the letter b



Which shapes
did you use?

What sound does
the letter B
make?

Triangle

Circle

Oval

Octagon

Rhombus

Heart

Semicircle

Parallelogram

Rectangle

Trapezoid

Square

Crescent

Pentagon

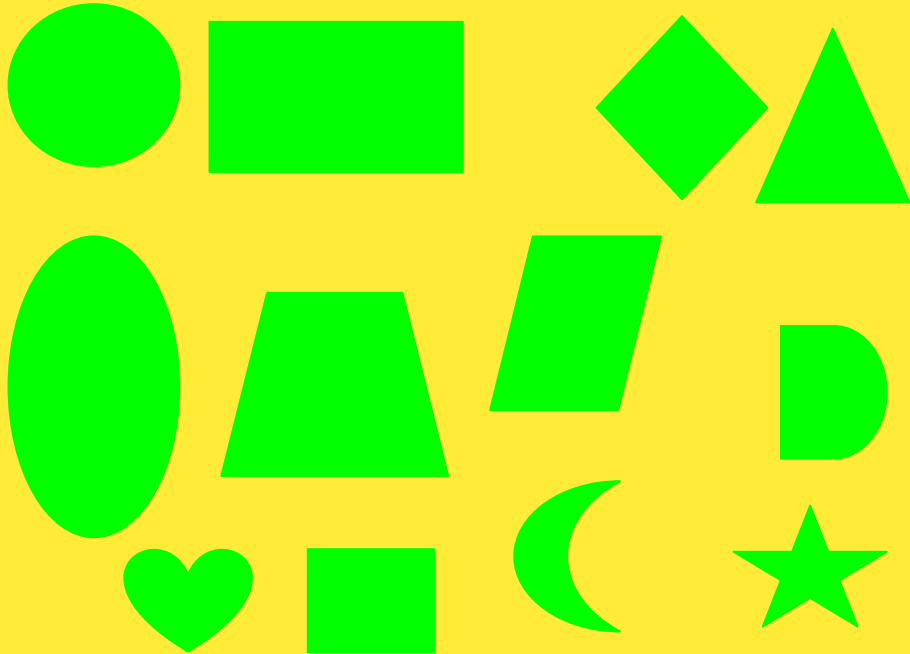
Star



Which pictures
start with the
"B" "b" sound?



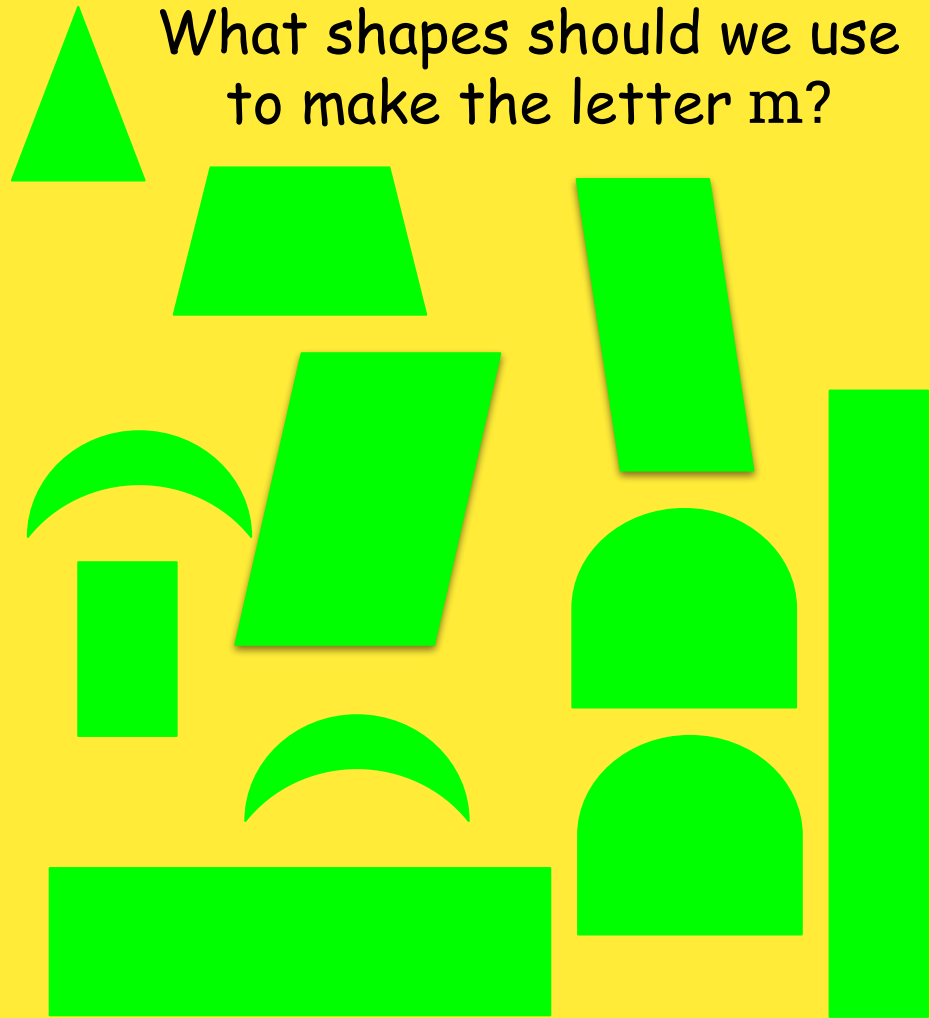
What shapes should we use to make the letter M?



Level 3



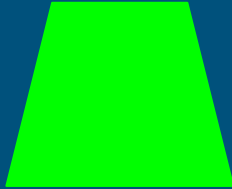
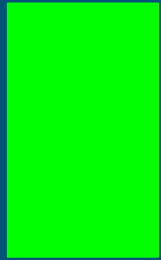
What shapes should we use
to make the letter m?



Level 3



Use shapes to make
the letter M



Which pictures
start with the
"M" "m" sound?



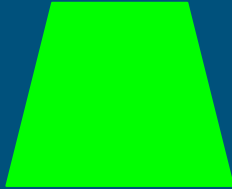
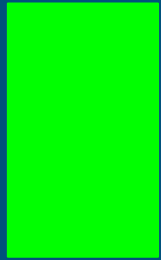
Use the shapes to make the letter m



Which pictures
start with the
"M" "m" sound?



Use shapes to make
the letter M



Which pictures
start with the
"M" "m" sound?



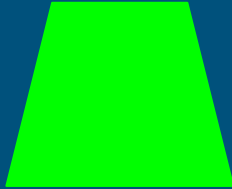
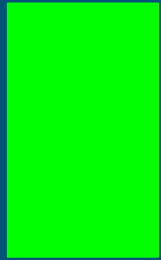
Use the shapes to make the
letter m



Which pictures
start with the
"M" "m" sound?



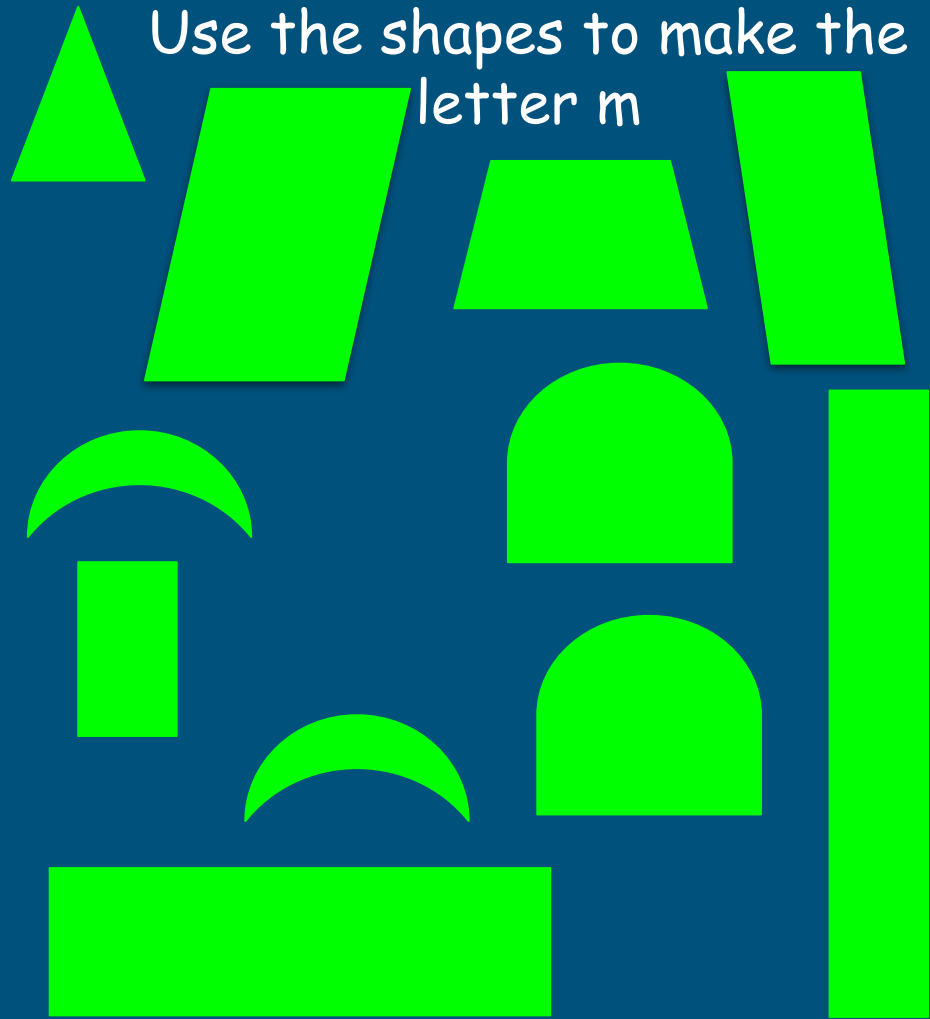
Use shapes to make
the letter M



Which pictures
start with the
"M" "m" sound?



Use the shapes to make the letter m



Which pictures
start with the
"M" "m" sound?



Which shapes
did you make?

What sound does
the letter Mm
make?

Triangle

Circle

Oval

Octagon

Rhombus

Heart

Semicircle

Parallelogram

Rectangle

Trapezoid

Square

Crescent

Pentagon

Star



Draw shapes right on top of the letter to match the letter K.
What shapes can you make?

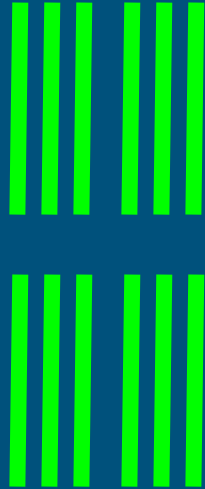
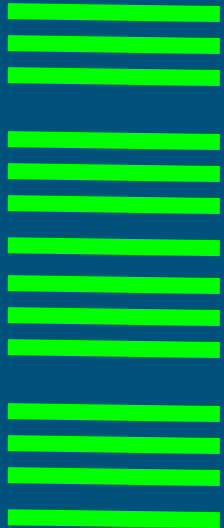


Level 4

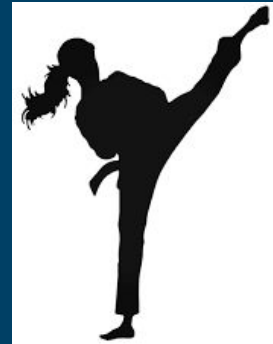


Draw shapes right on top of the letter to match the letter K.
What shapes can you make?

Level 4

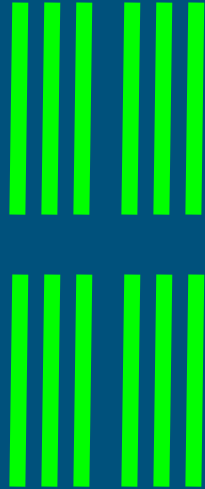
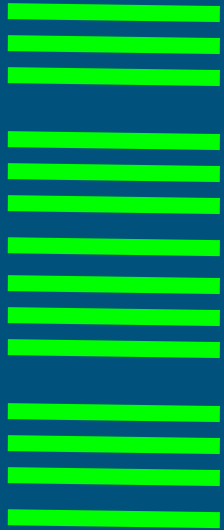


Which pictures
start with the
"K" "k" sound?

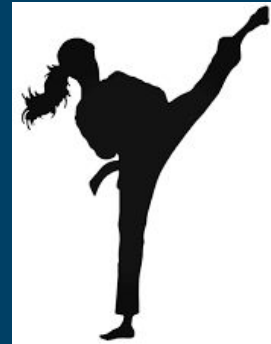


Draw shapes right on top of the letter to match the letter k?

Level 4

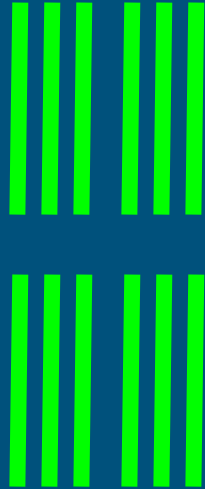
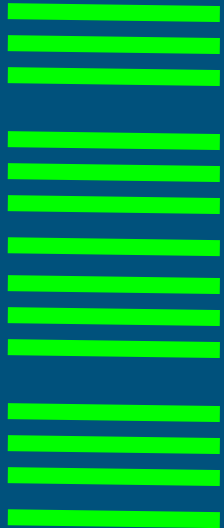


Which pictures
start with the
"K" "k" sound?

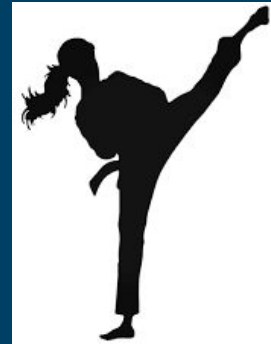


Draw shapes right on top of the letter to match the letter K.
What shapes can you make?

Level 4

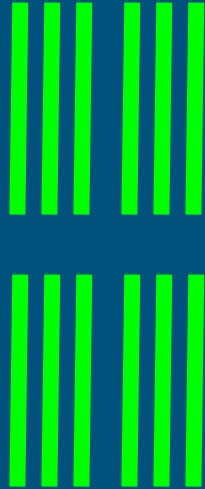
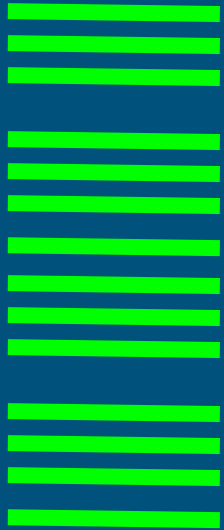


Which pictures
start with the
"K" "k" sound?

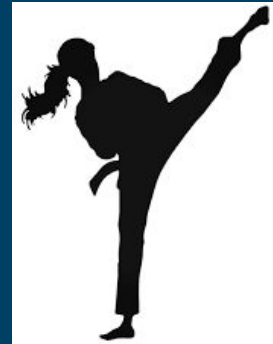


Draw shapes right on top of the letter to match the letter k?

Level 4

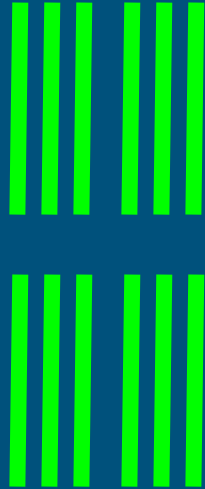
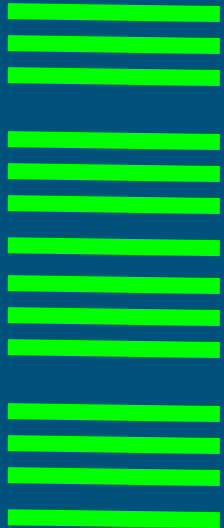


Which pictures
start with the
"K" "k" sound?

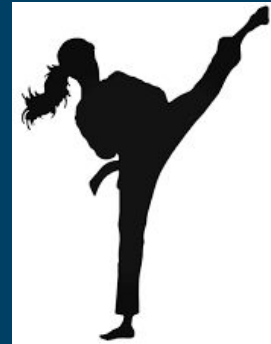


Draw shapes right on top of the letter to match the letter K.
What shapes can you make?

Level 4

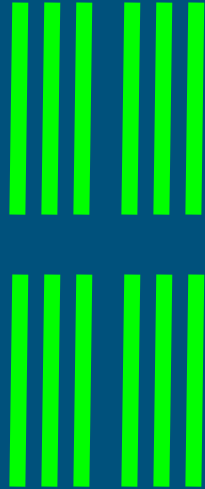
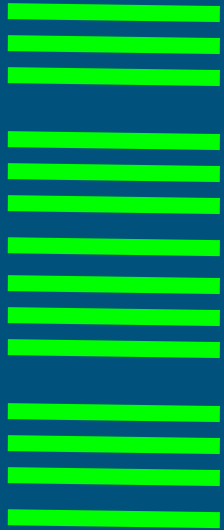


Which pictures start with the "K" "k" sound?

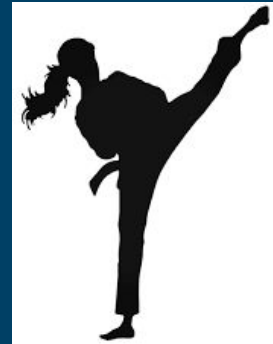


Draw shapes right on top of the letter to match the letter k?

Level 4



Which pictures
start with the
"K" "k" sound?



Which shapes
did you make?

What sound does
the letter Kk
make?

Triangle

Circle

Oval

Octagon

Rhombus

Heart

Semicircle

Parallelogram

Rectangle

Trapezoid

Square

Crescent

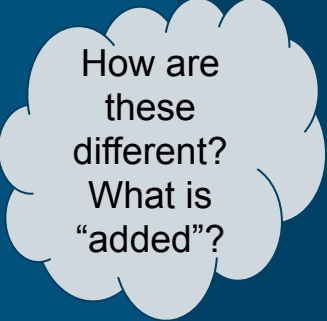
Pentagon

Star



Level 1

Level 2



How are
these
different?
What is
“added”?

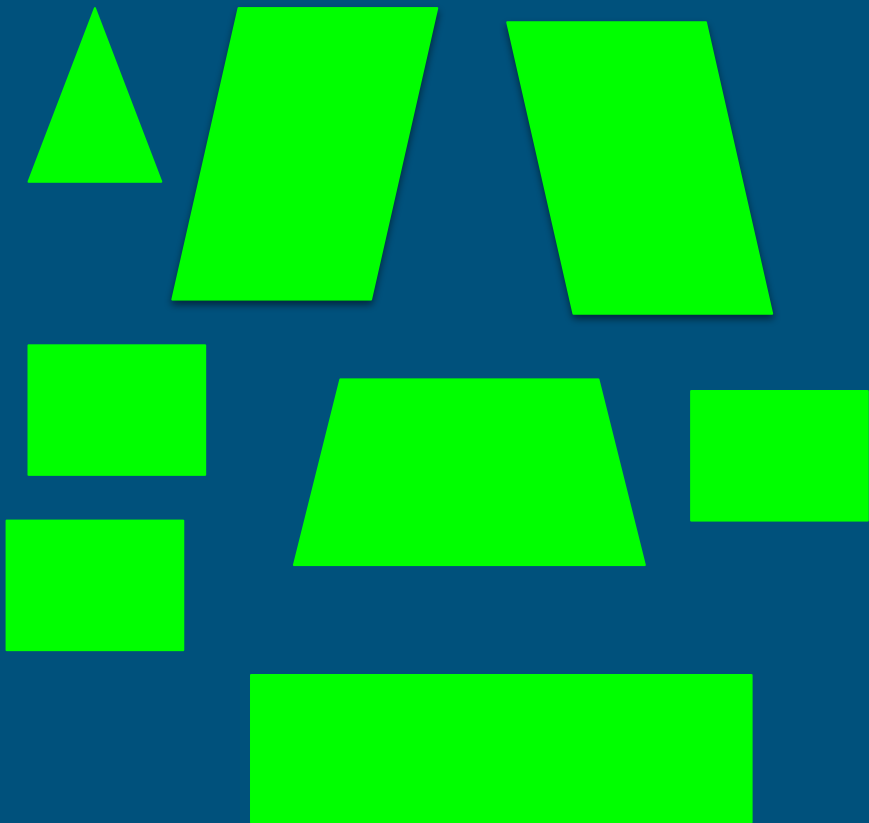
Level 3

Level 4

Additional letters follow, but the slides may need to be adjusted depending on the level of complexity you will use.

Use the shapes to make the letter C

Level 1



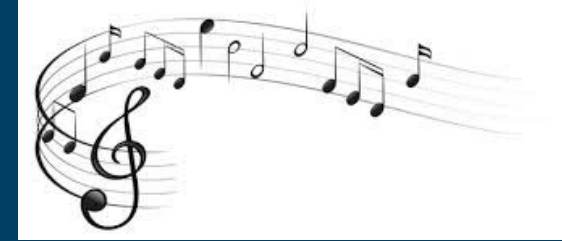
Use the shapes to make the letter c



Level 1

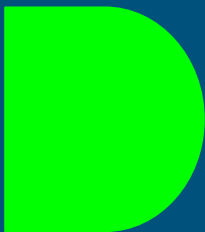


Which pictures
start with the
"C" "c" sound?

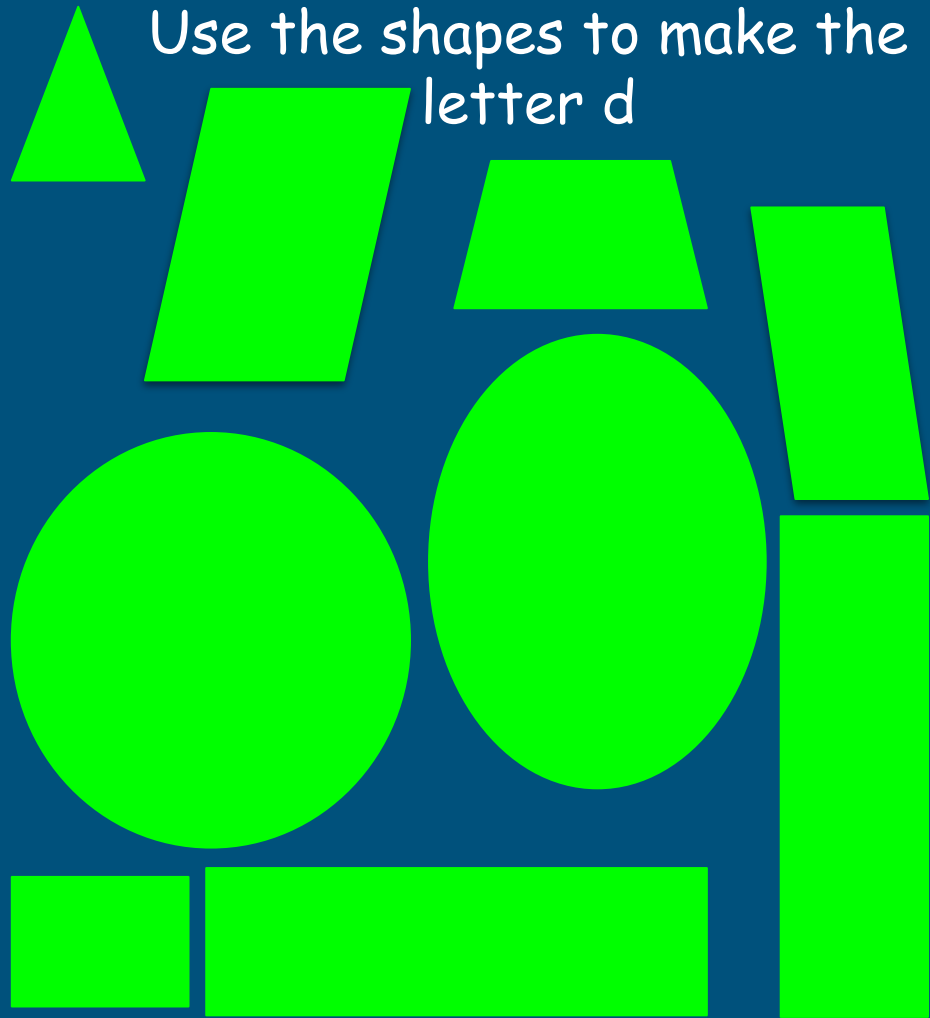


Use the shapes to make the letter D

Level 1



Use the shapes to make the letter d



Level 1

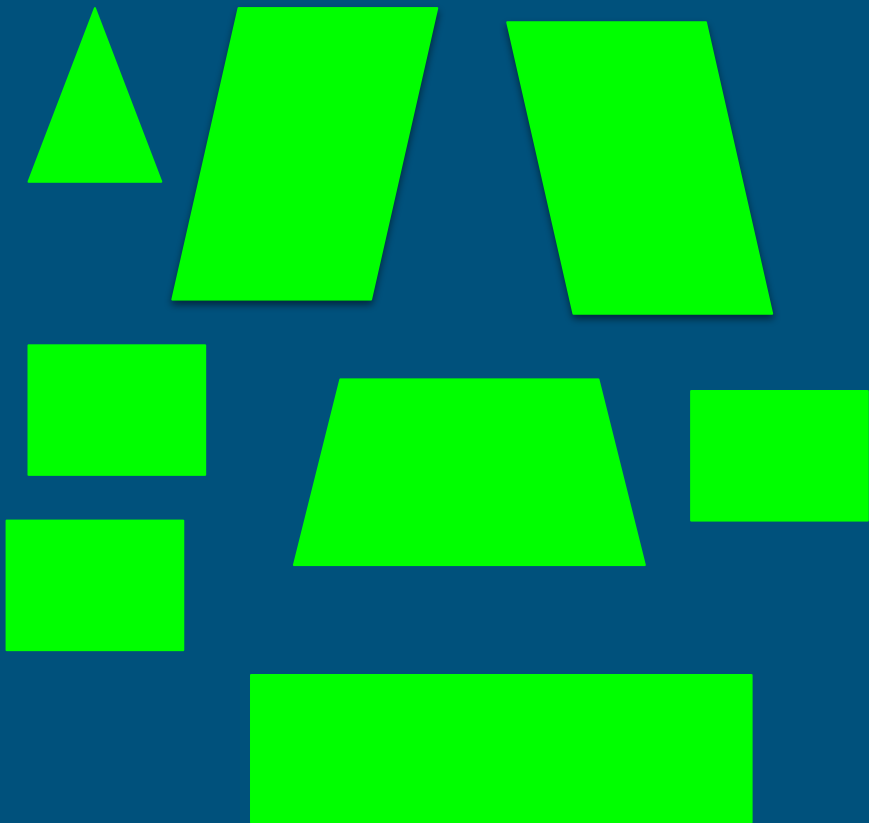


Which pictures
start with the
"D" "d" sound?



Use the shapes to make the letter E

Level 1



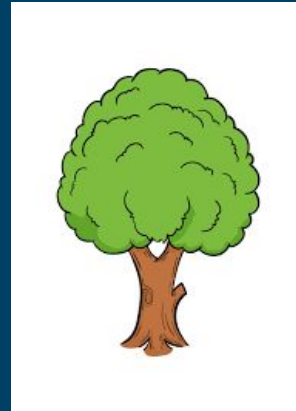
Use the shapes to make the letter e



Level 1

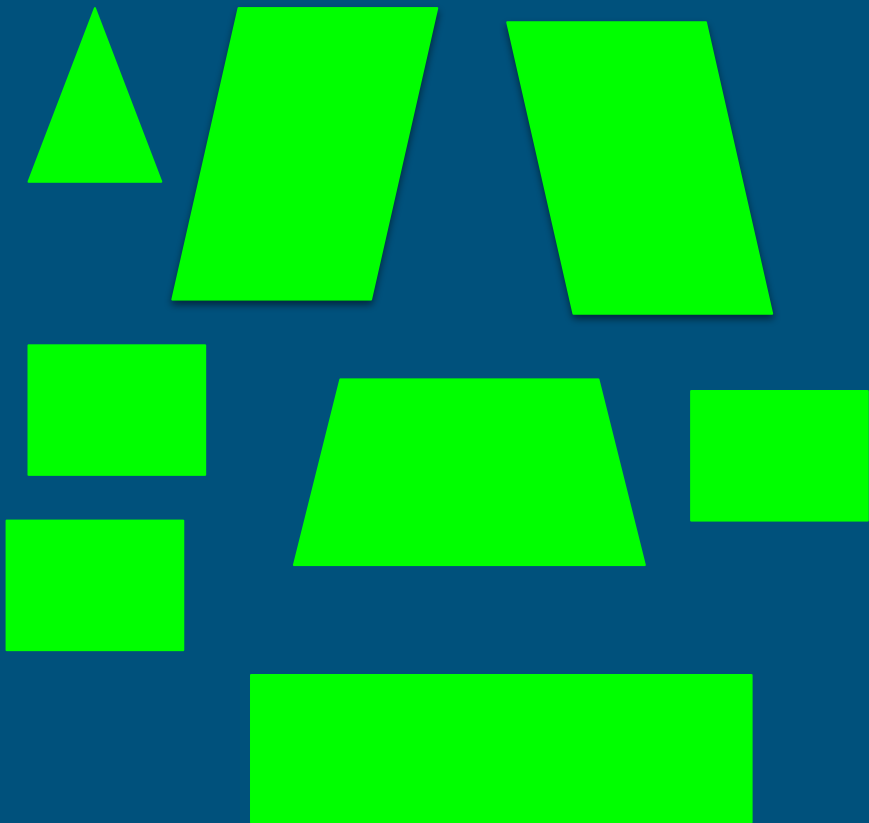


Which pictures
start with the
"E" "e" sound?



Use the shapes to make the letter F

Level 1



Which pictures
start with the
"F" "f" sound?

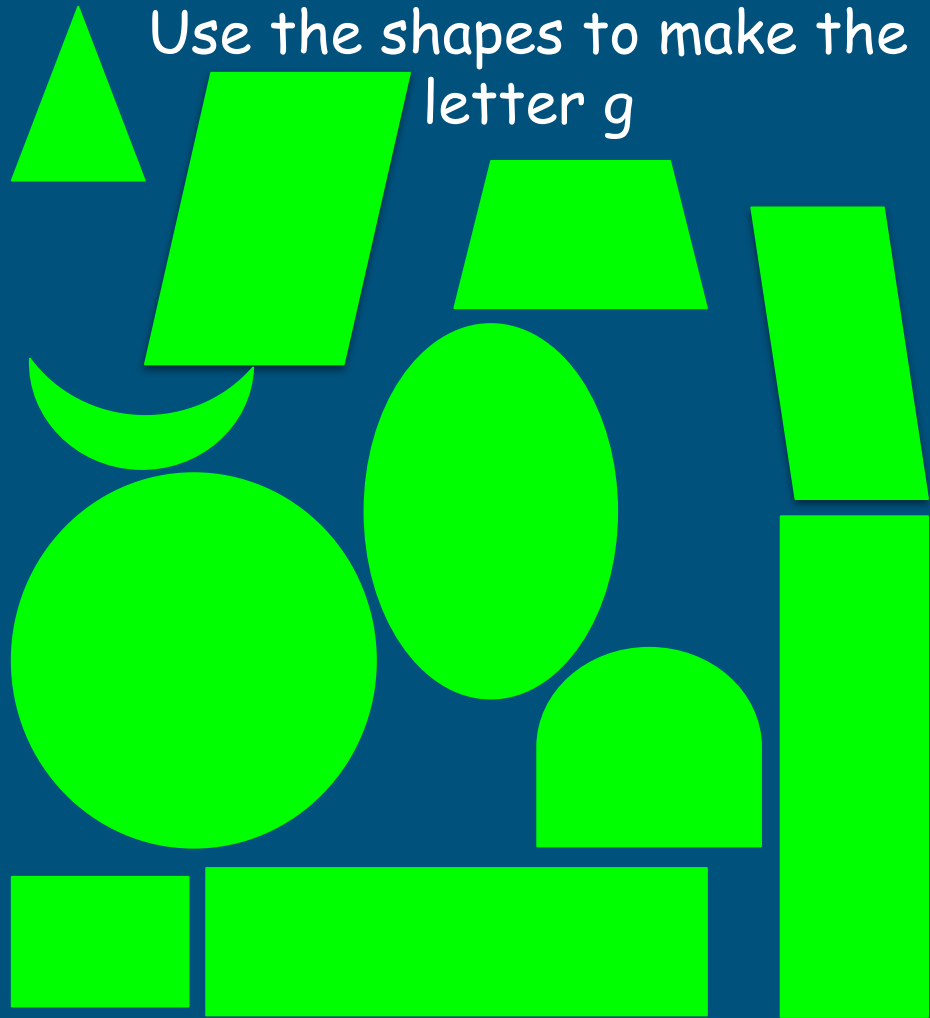


Use the shapes to make the letter G

Level 1



Use the shapes to make the letter g



Level 1



Which pictures
start with the
"G" "g" sound?

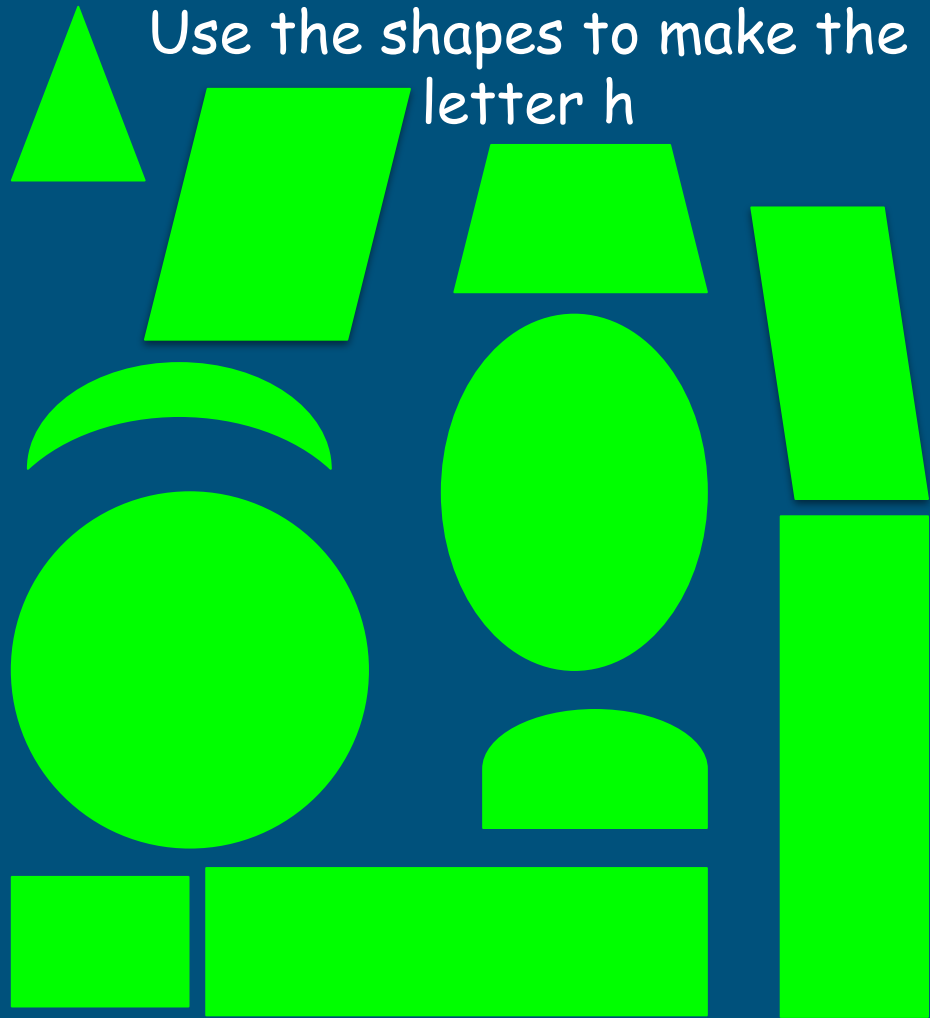


Use the shapes to make the letter H

Level 1



Use the shapes to make the letter h



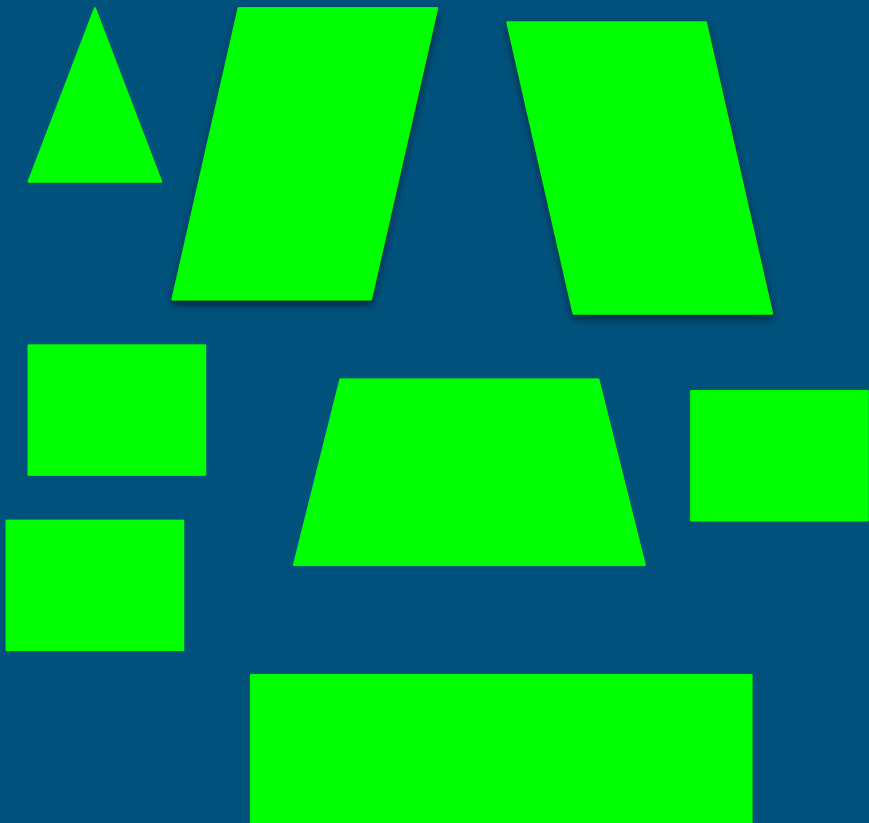
Level 1



Which pictures start with the "H" "h" sound?



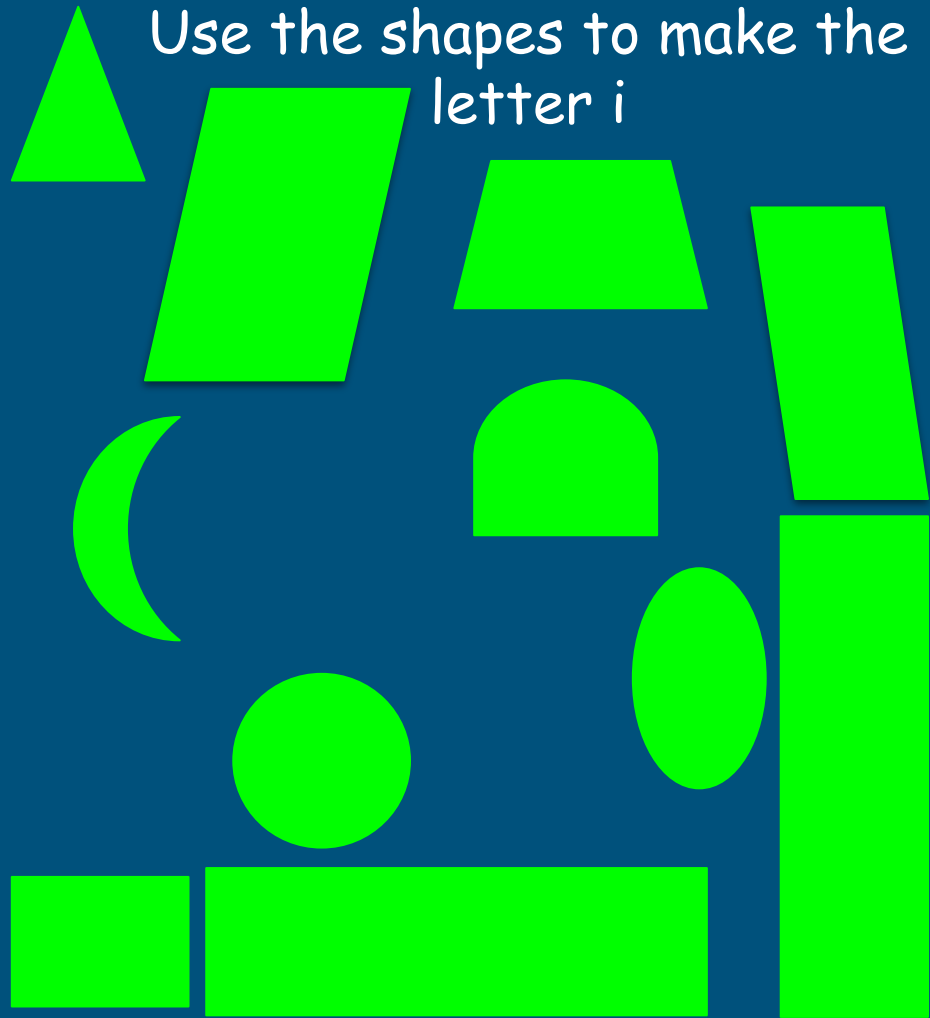
Use the shapes to make the
letter I



Level 1



Use the shapes to make the letter i



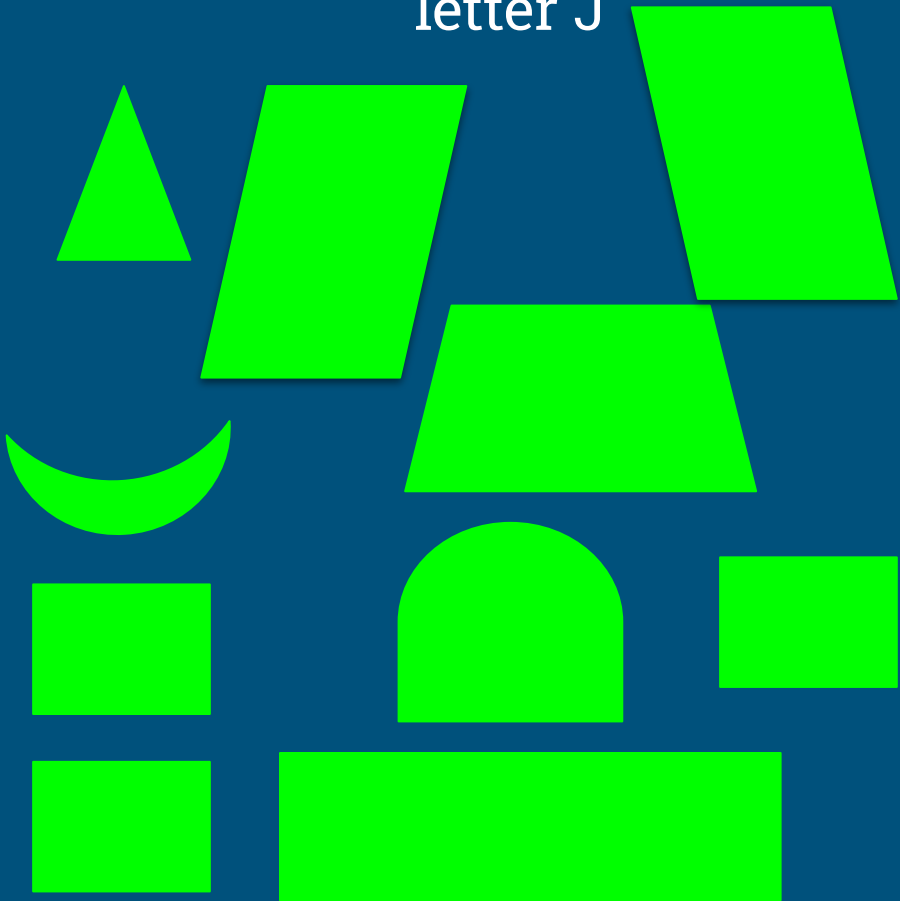
Level 1



Which pictures start with the "I" "i" sound?



Use the shapes to make the
letter J



Level 1



Use the shapes to make the letter j



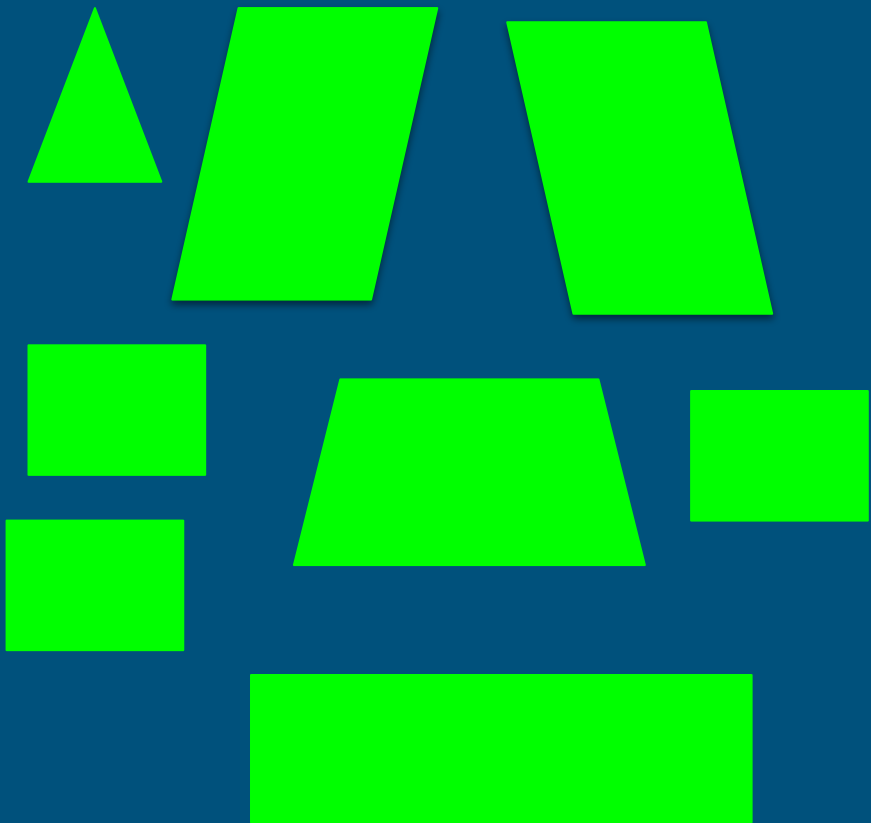
Level 1



Which pictures
start with the
"J" "j" sound?



Use the shapes to make the letter L



Level 1



Use the shapes to make the letter l



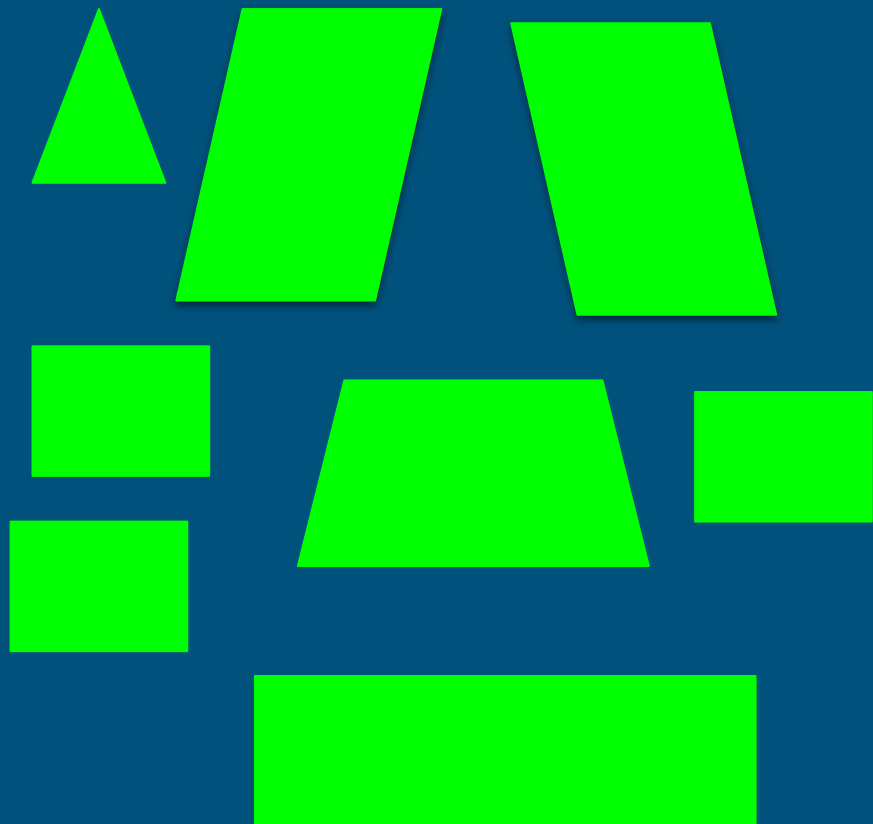
Level 1



Which pictures
start with the
"L" "I" sound?



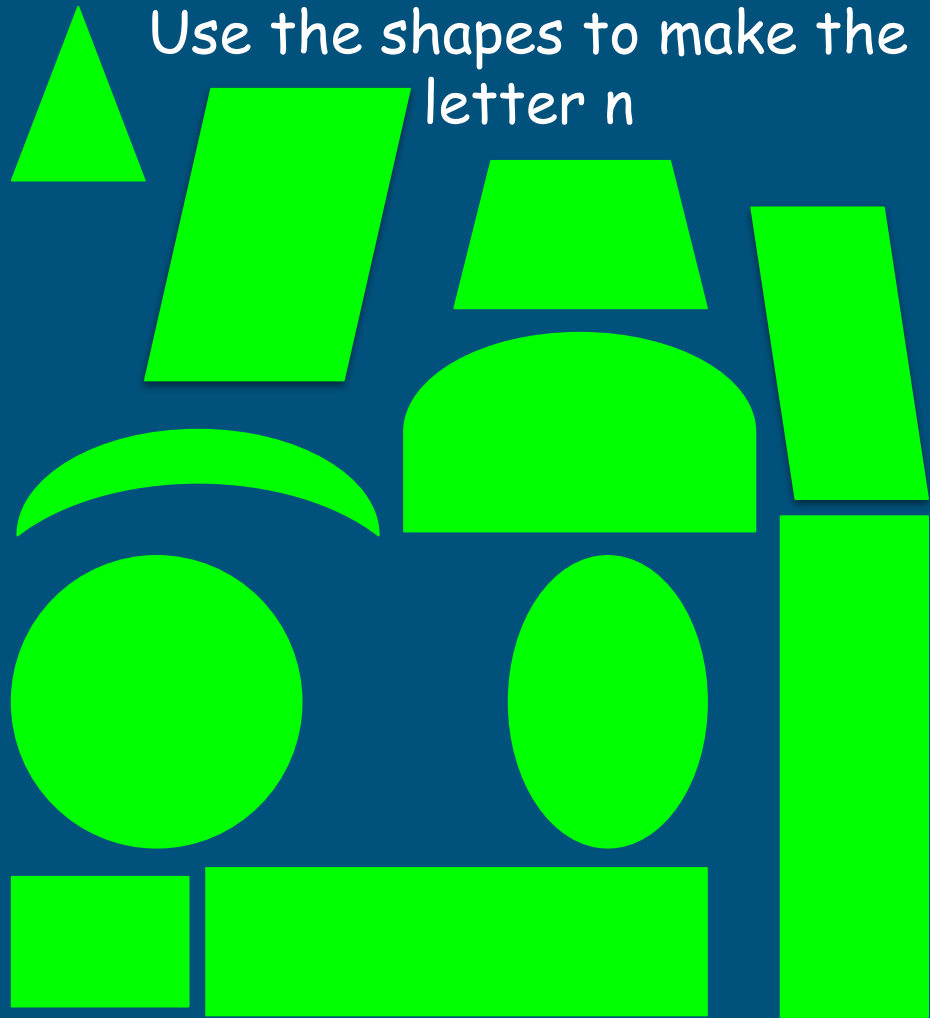
Use the shapes to make the letter N



Level 1



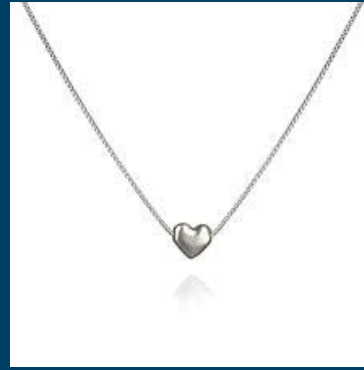
Use the shapes to make the letter n



Level 1

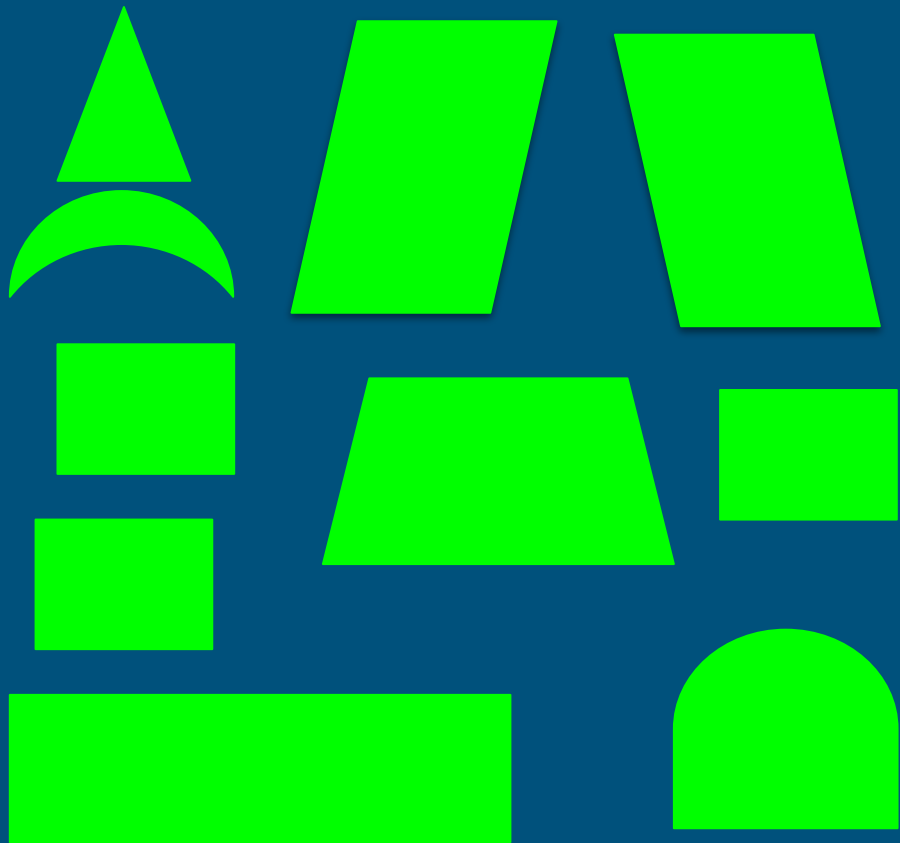


Which pictures start with the "N" "n" sound?

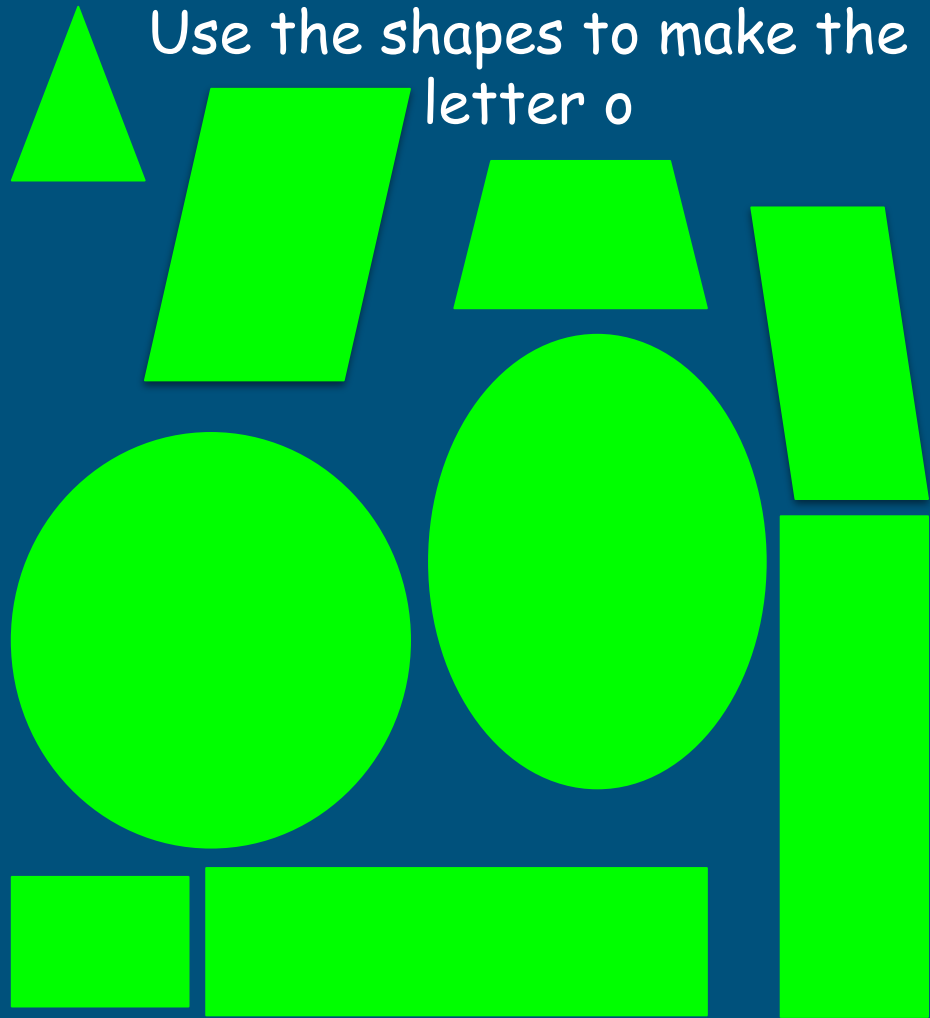


Use the shapes to make the letter O

Level 1



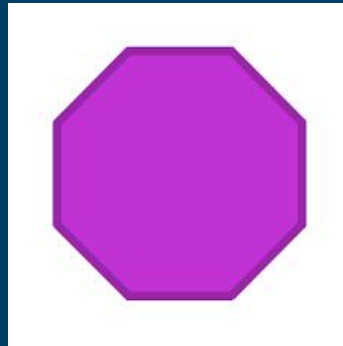
Use the shapes to make the letter o



Level 1



Which pictures start with the "O" "o" sound?

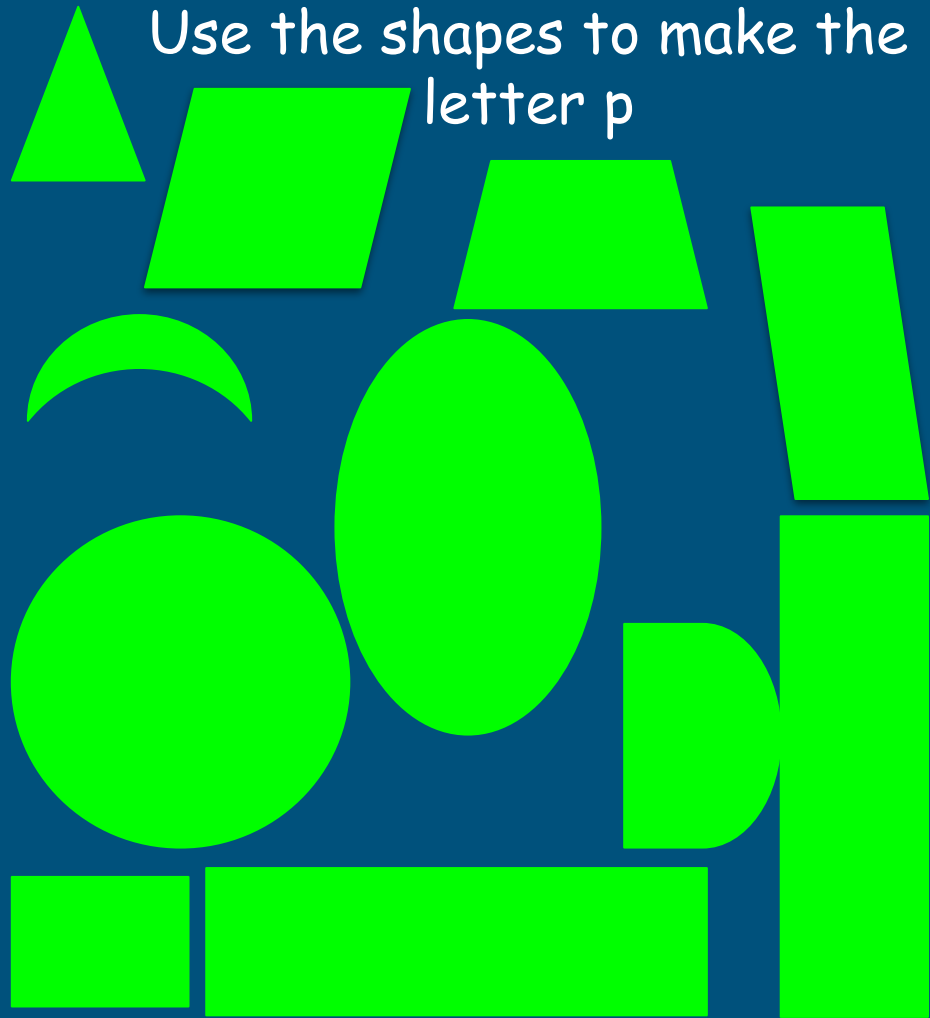


Use the shapes to make the letter P

Level 1



Use the shapes to make the letter p



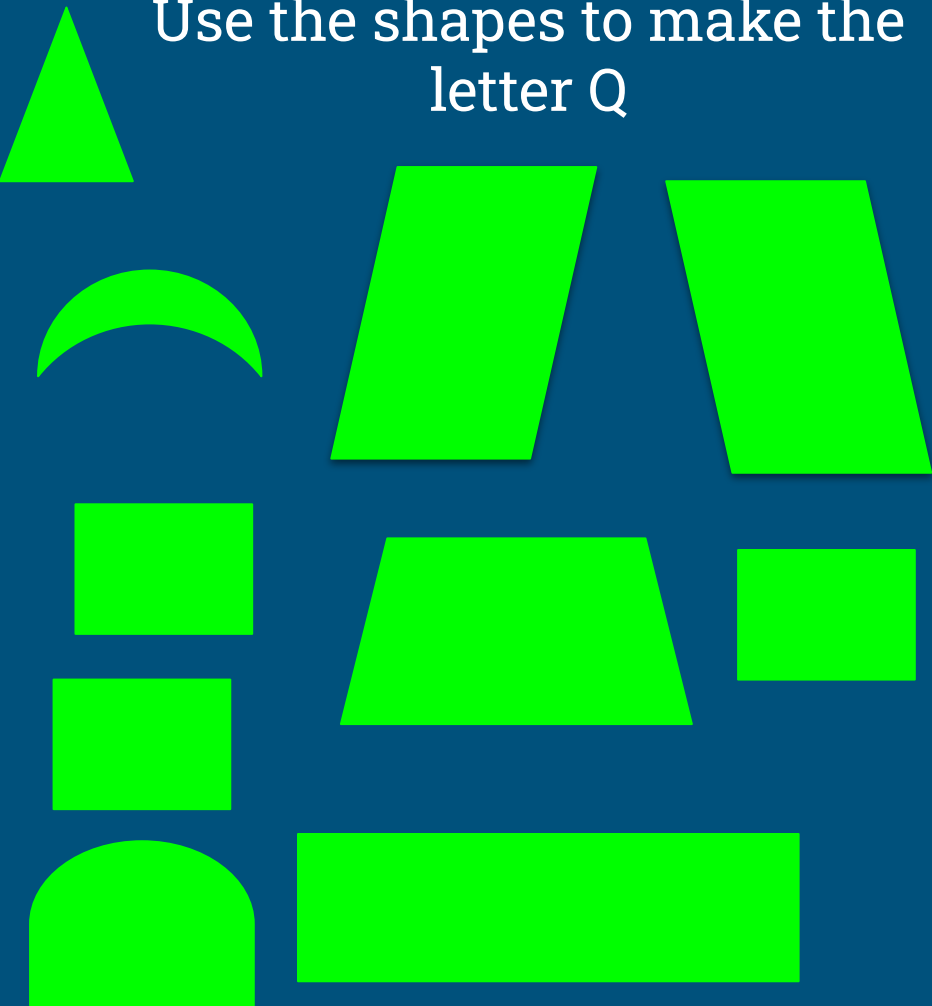
Level 1



Which pictures start with the "p" "p" sound?



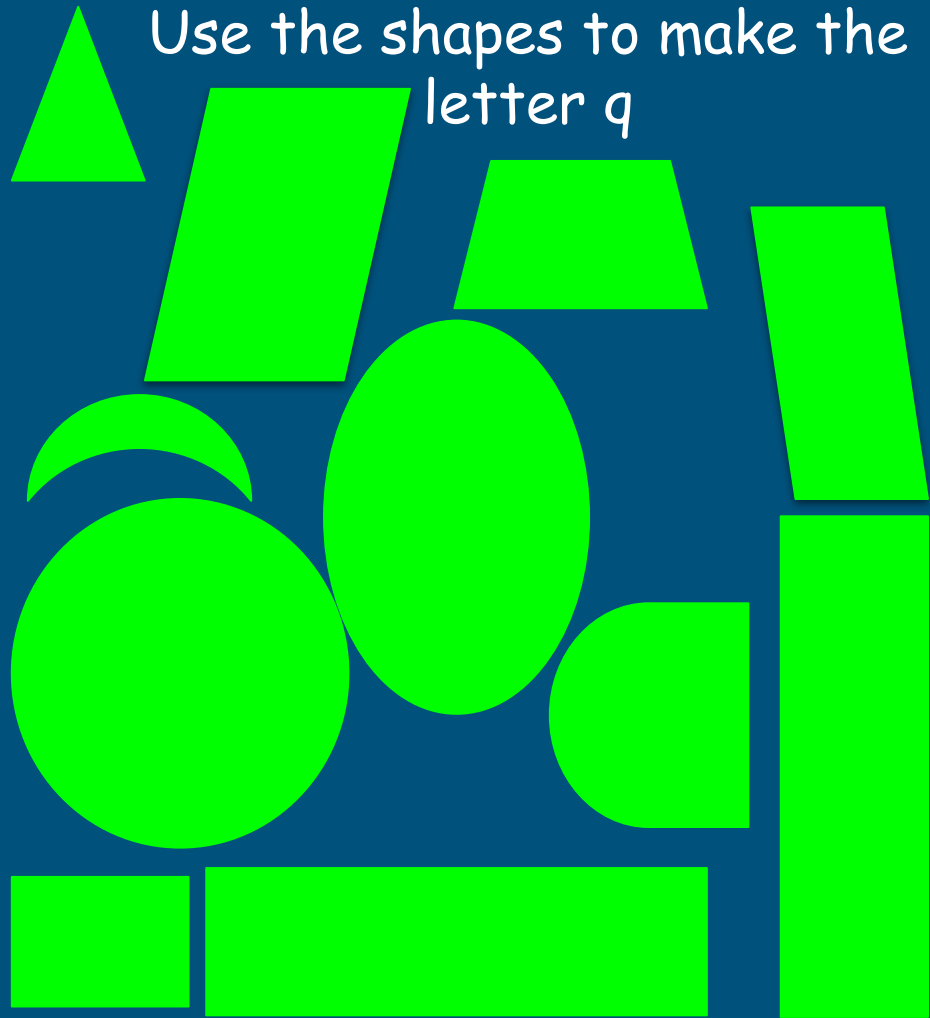
Use the shapes to make the letter Q



Level 1



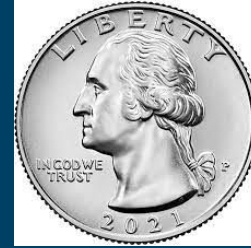
Use the shapes to make the letter q



Level 1



Which pictures
start with the
"Q" "q" sound?



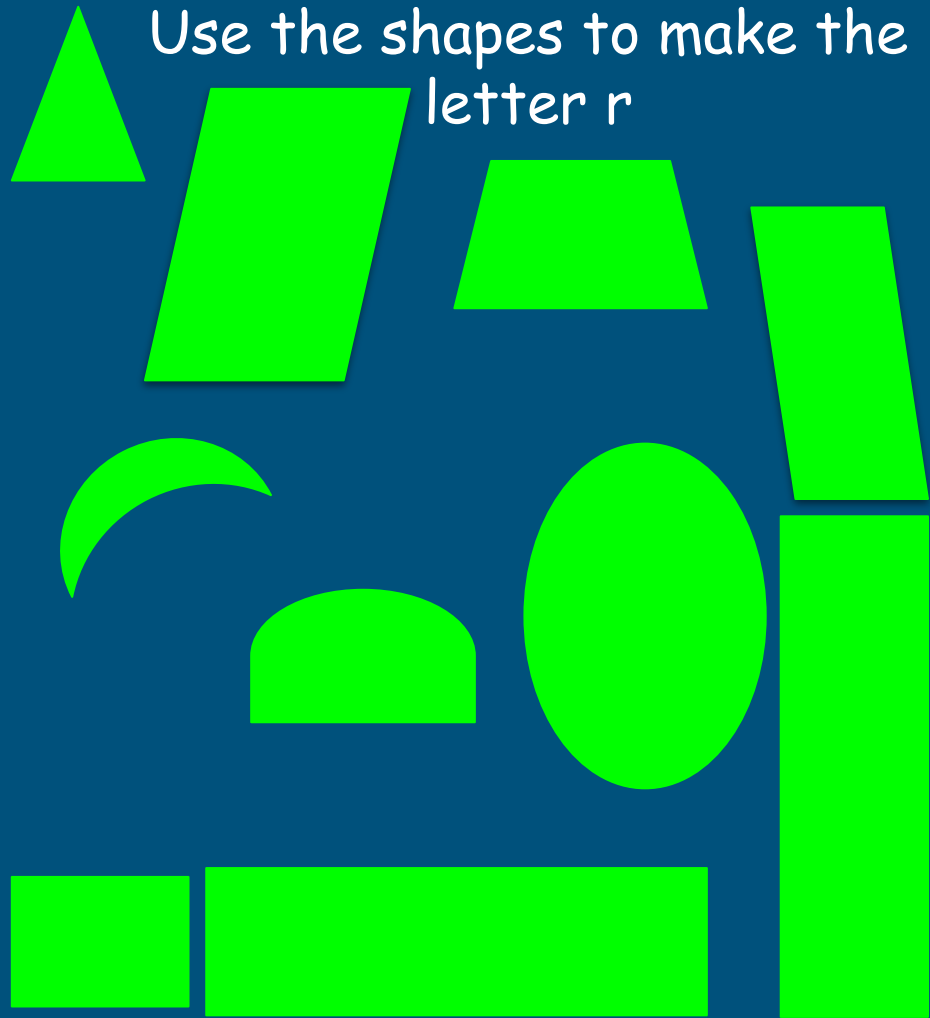
Use the shapes to make the
letter R



Level 1



Use the shapes to make the letter r



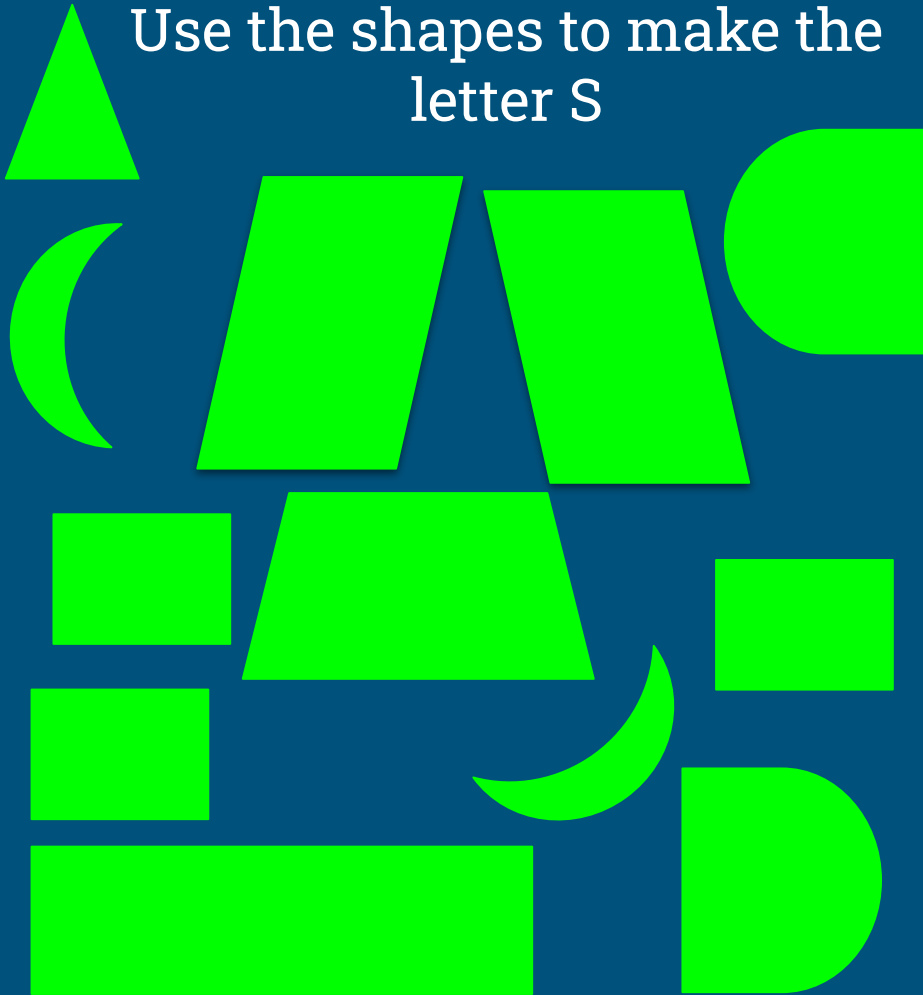
Level 1



Which pictures
start with the
"R" "r" sound?



Use the shapes to make the
letter S



Level 1



Use the shapes to make the letter s



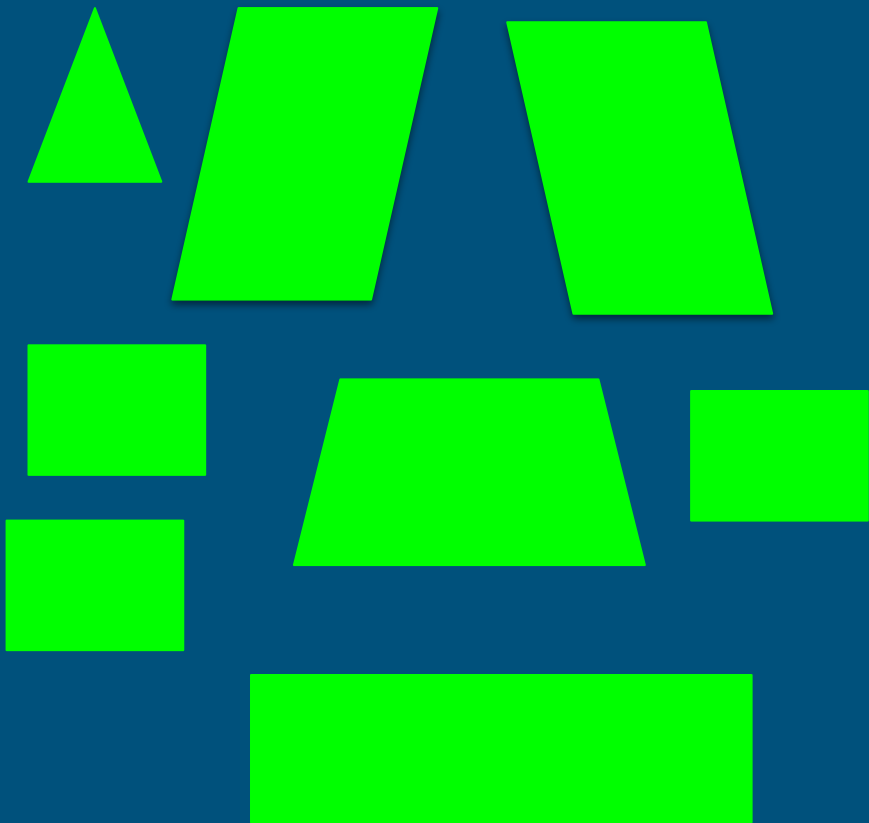
Level 1



Which pictures
start with the
"S" "s" sound?



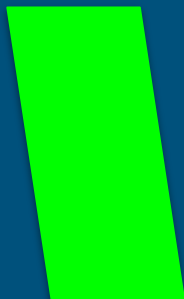
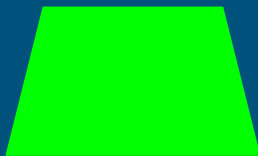
Use the shapes to make the
letter T



Level 1



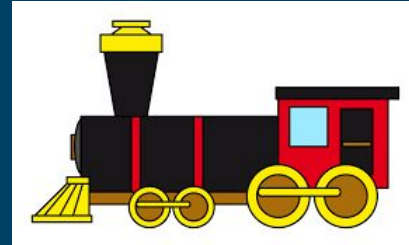
Use the shapes to make the letter t



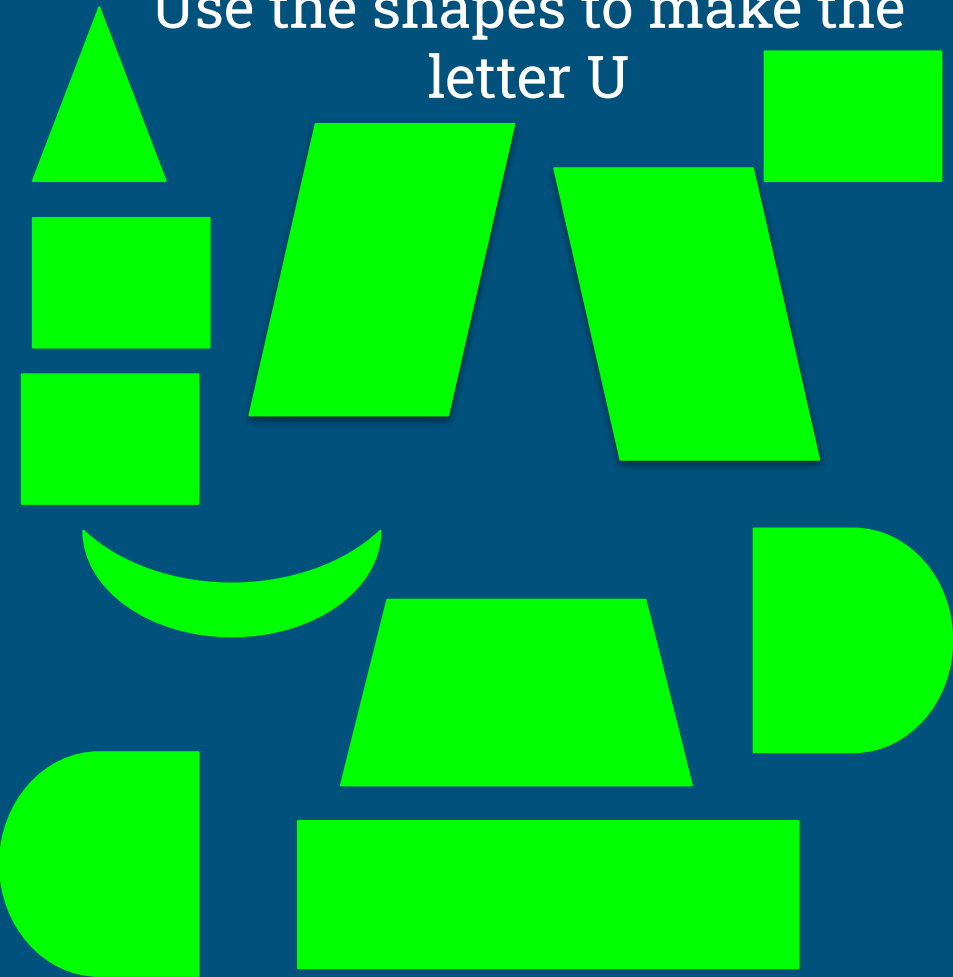
Level 1



Which pictures
start with the
"T" "t" sound?



Use the shapes to make the
letter U



Level 1



Use the shapes to make the letter u



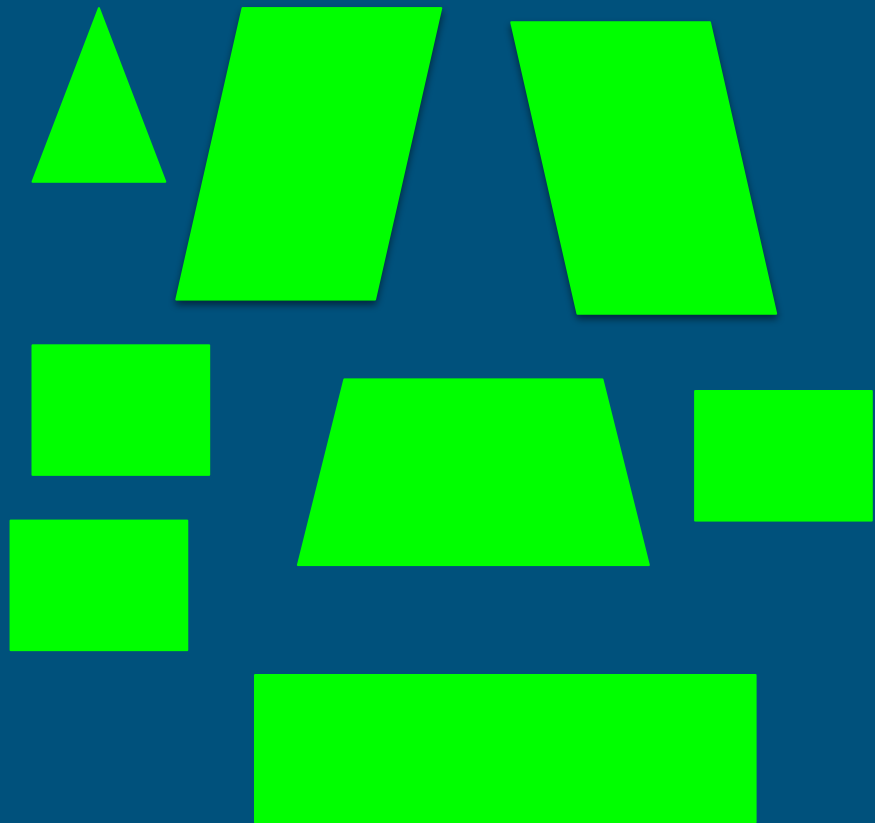
Level 1



Which pictures start with the "U" "u" sound?



Use the shapes to make the letter V



Level 1



Use the shapes to make the letter v



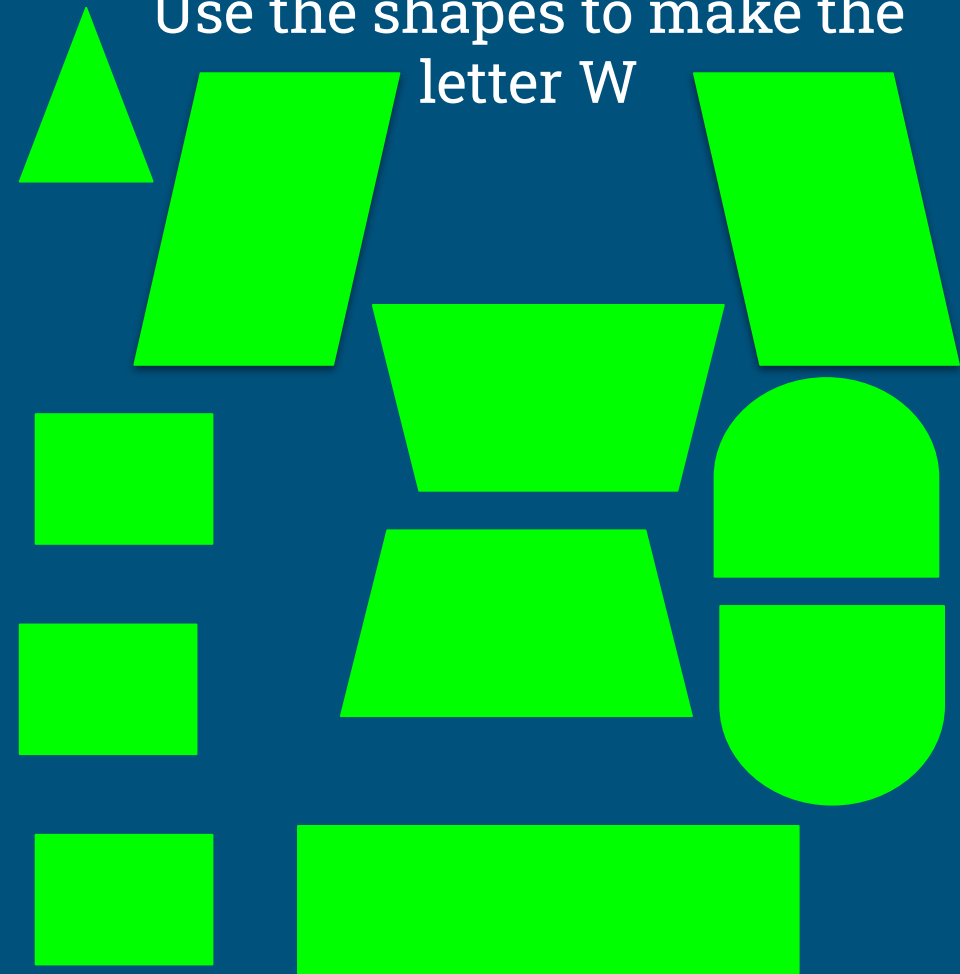
Level 1



Which pictures
start with the
"V" "v" sound?



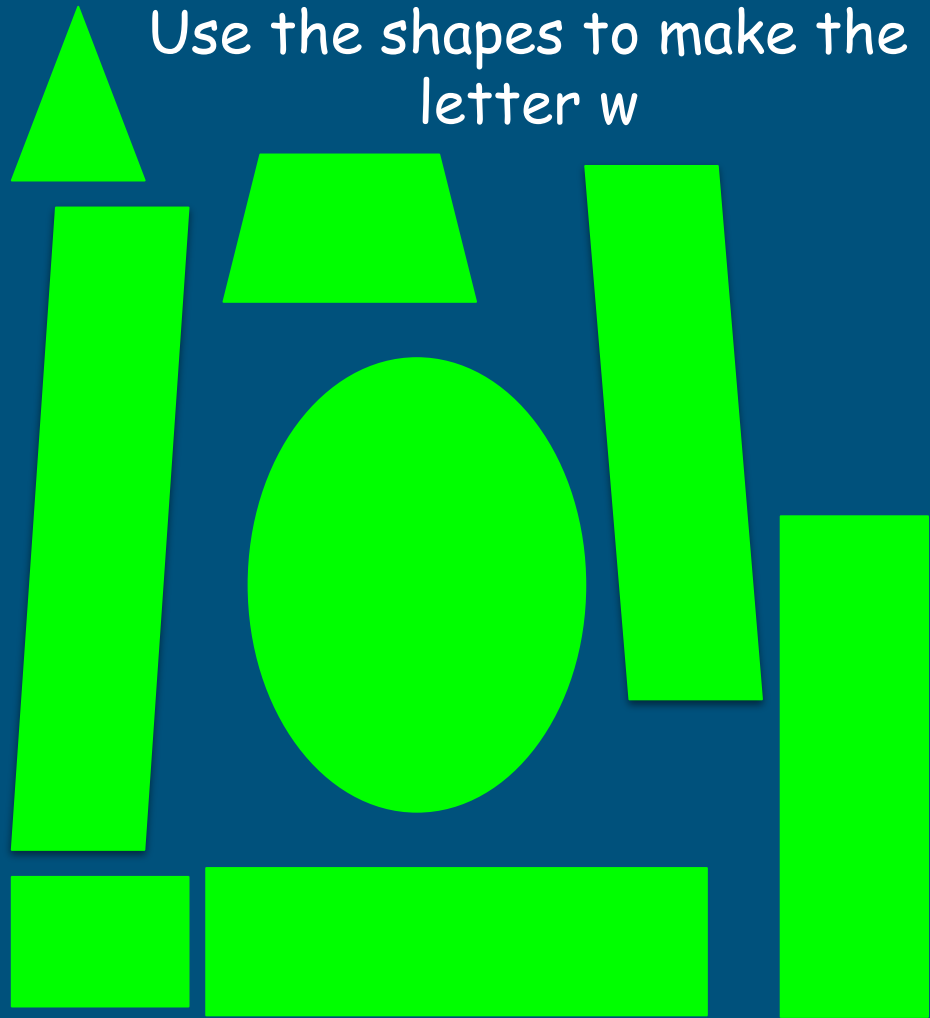
Use the shapes to make the
letter W



Level 1



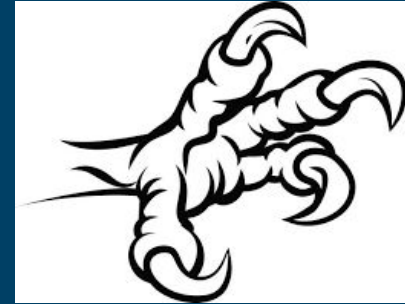
Use the shapes to make the letter w



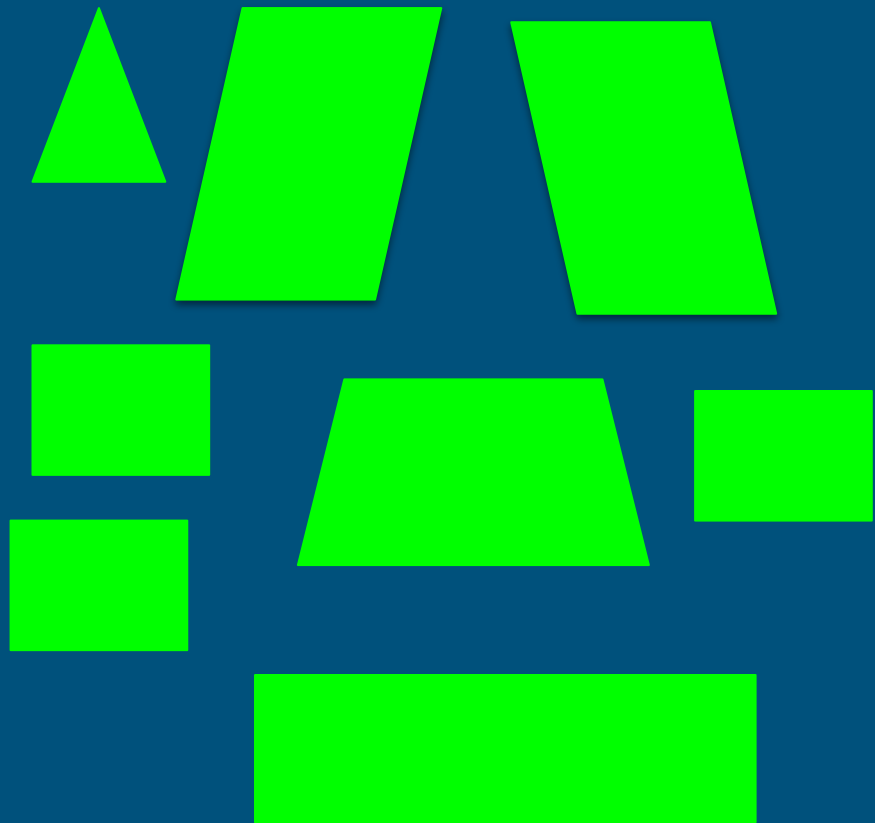
Level 1



Which pictures
start with the
"W" "w" sound?



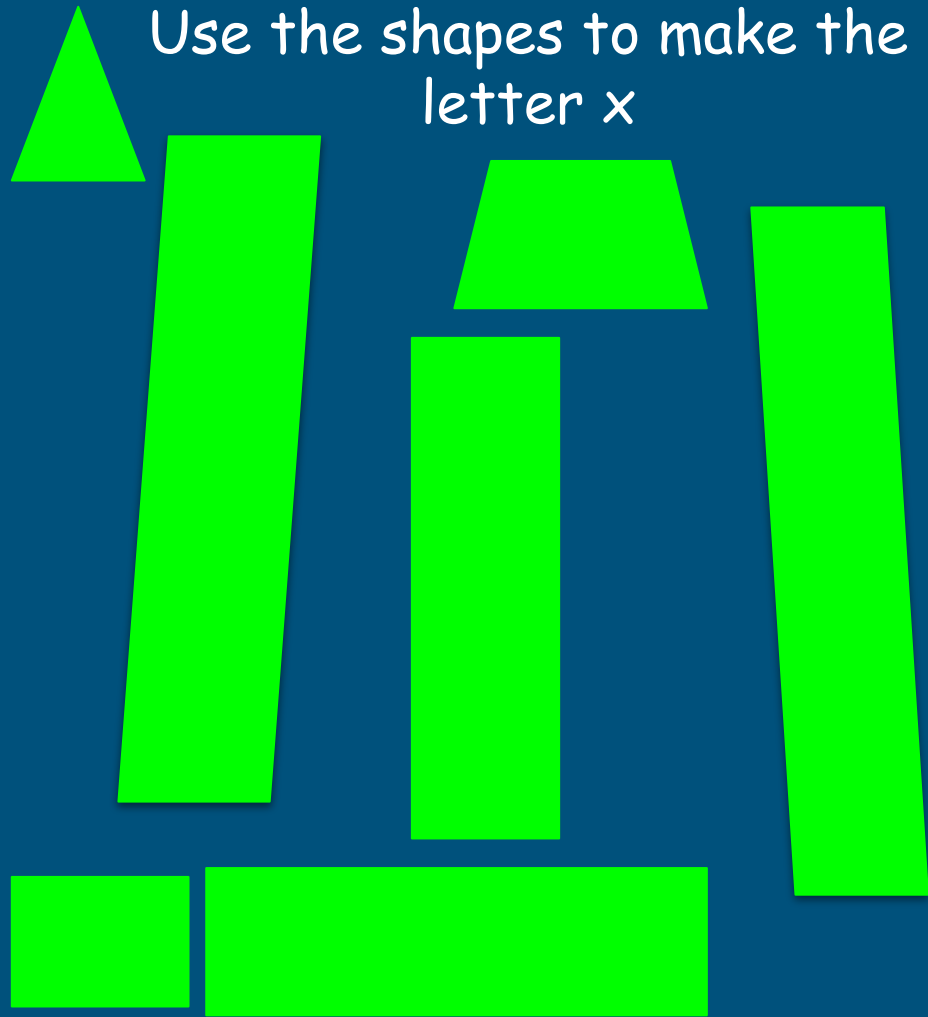
Use the shapes to make the letter X



Level 1



Use the shapes to make the letter x



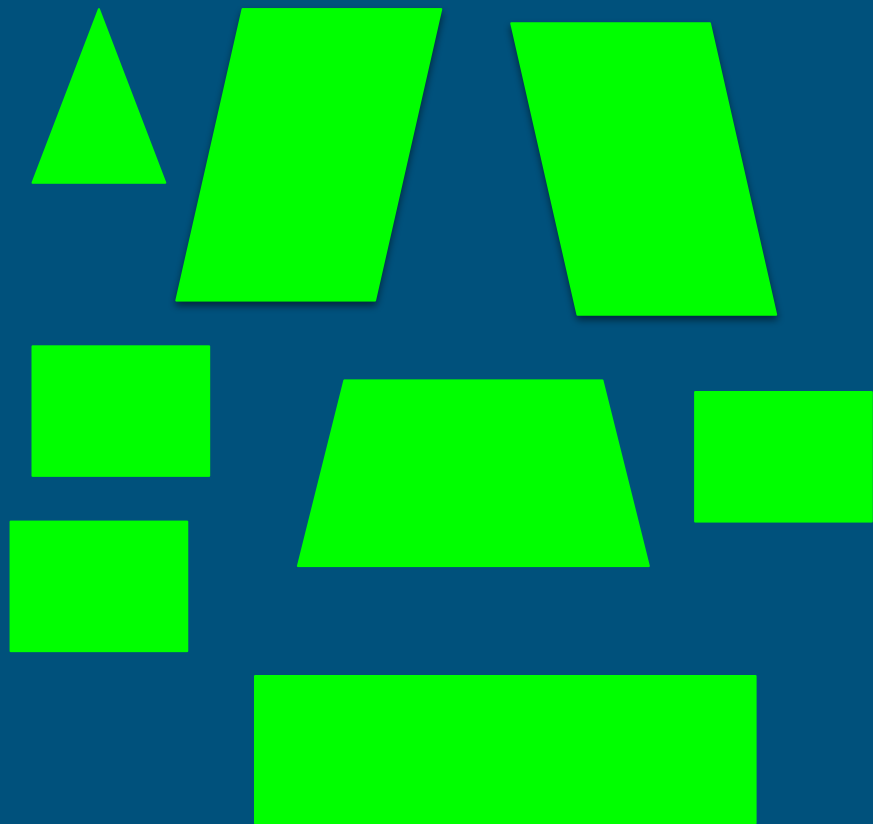
Level 1



Which pictures
start with the
"X" "x" sound?



Use the shapes to make the letter Y



Level 1



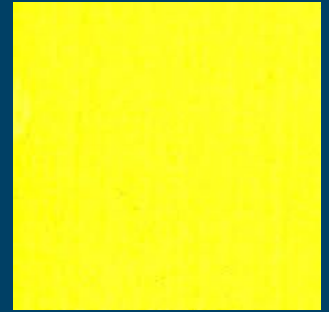
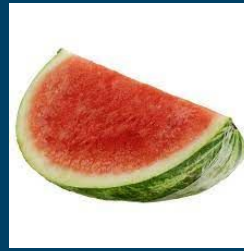
Use the shapes to make the letter y



Level 1

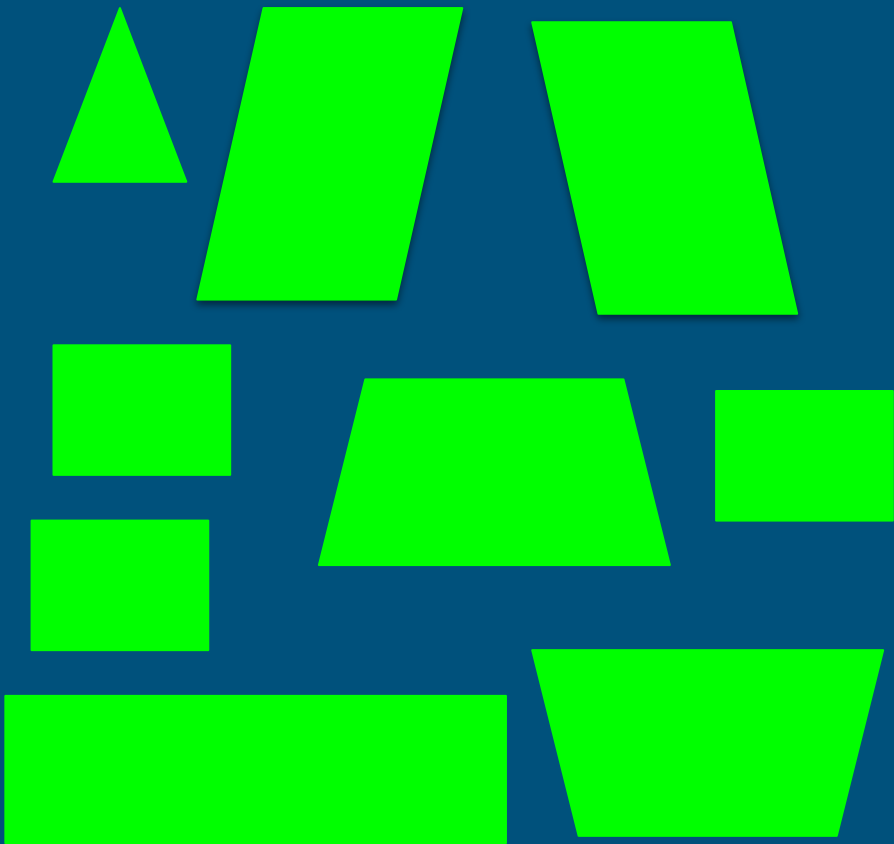


Which pictures
start with the
"y" "y" sound?



Use the shapes to make the letter Z

Level 1



Use the shapes to make the letter z



Level 1



Which pictures start with the "Z" "z" sound?





Problem Posing in Preschool

Connecting storytelling to
mathematics

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Young children love to tell stories, and they learn the structure of stories by telling them. Come and explore ways that your learners can story-tell (problem pose) as young learners, supporting their development of part and whole, putting together, and taking apart.

What is the
story?



What story do
we see?



What story do
we see?



Structure of the story

What did we notice each story had?

What is the structure of these stories?

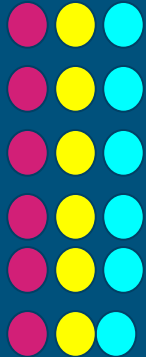
How might these stories relate to your early learners?

Do stories have to have a question?

Let's revisit our
stories, and build
them on our
Part-Whole Mats

The tree had just one hummingbird feeding on it. Then new hummingbirds flew up. Now there are two hummingbirds feeding on the tree. How many new hummingbirds flew up to the tree?



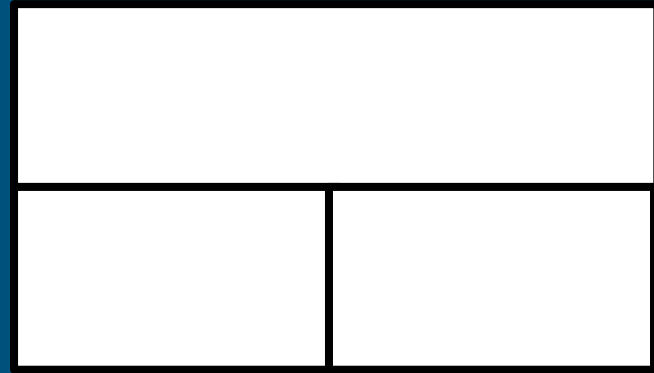


Two bobcats climbed onto a cactus. One was already on the top of the cactus? How many bobcats are on the cactus?





The cactus had no berries.
Then the cactus grew 8
berries. There are 8
berries in all.

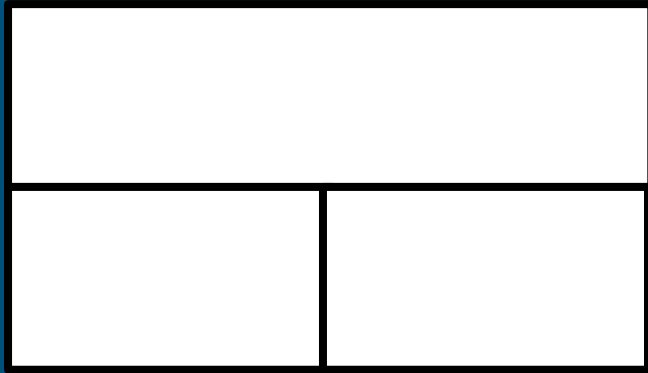


What kind of
stories come from
one picture?

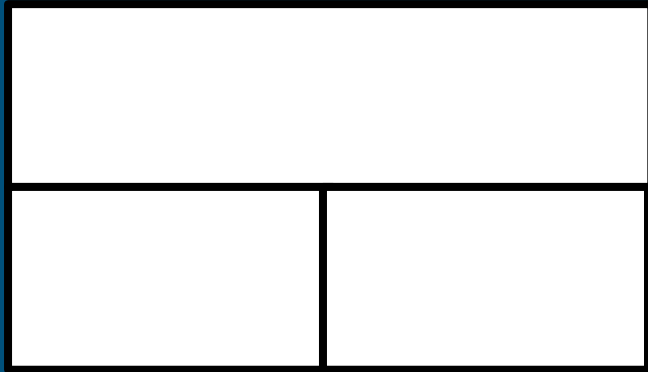
What story do we see?
How can we build it on our
mat?



What story do we see? How can we build it on our mat?



What story do we see? How can we build it on our mat?



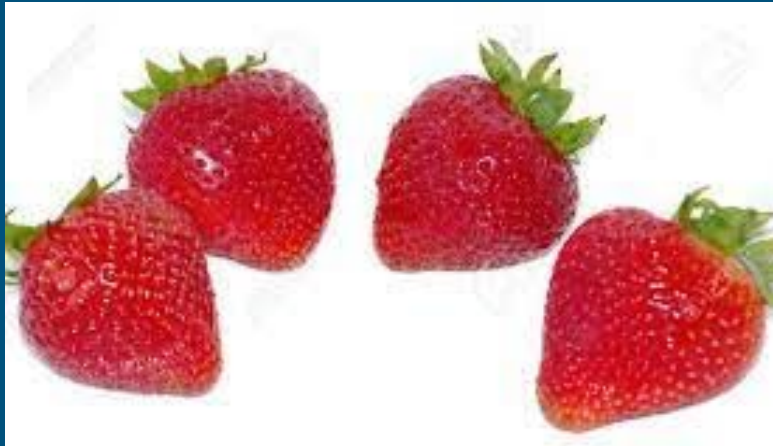
What did you
notice about the
experience this
time?



Today's number of the day is

4

Let's count and touch these
four strawberries together.

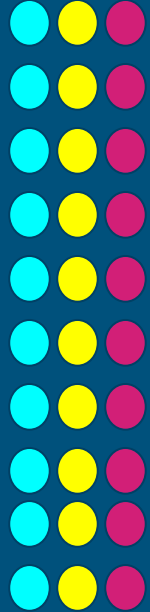


Choose one picture to tell a story that
has the number 4 in it.

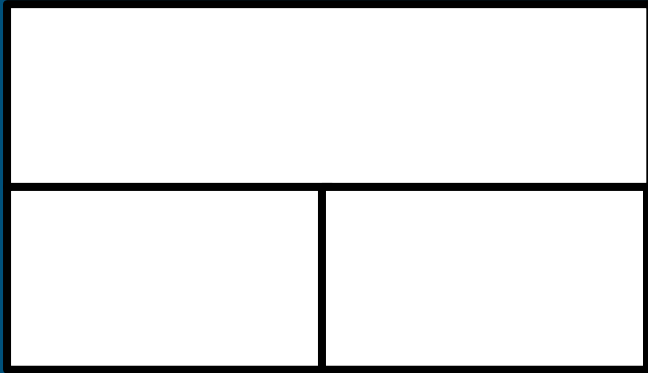
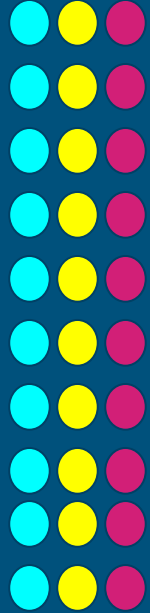


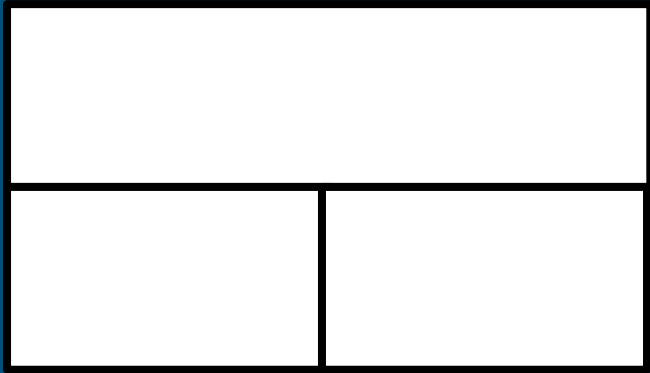
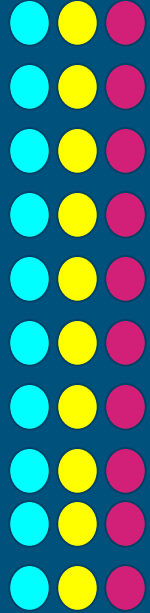
Build your story on the
Part-Whole Mat

4

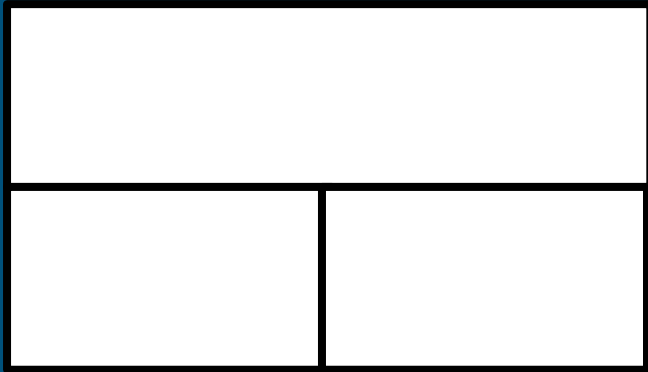
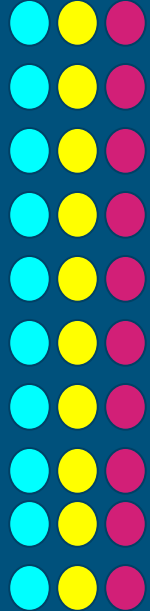




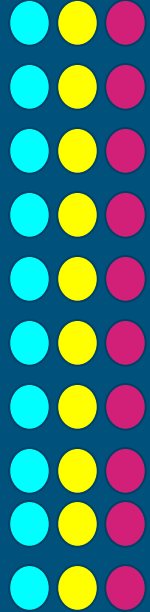




4



4



Today's number of the day is

3

Let's count and touch these
three owls together.

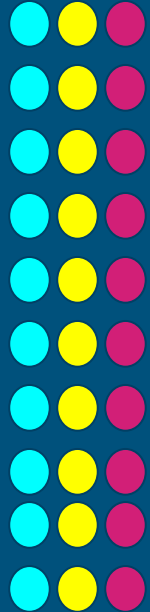


Choose one picture to tell a story that
has the number 3 in it.

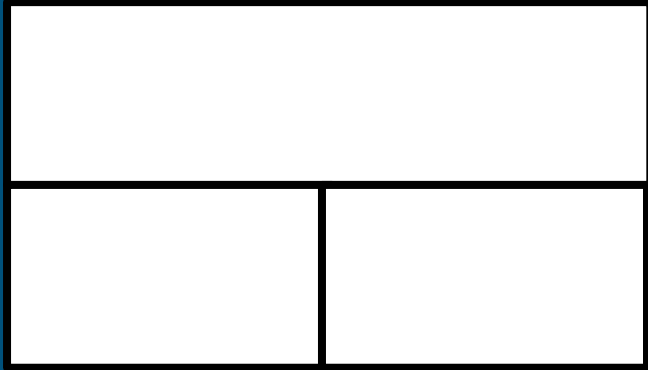
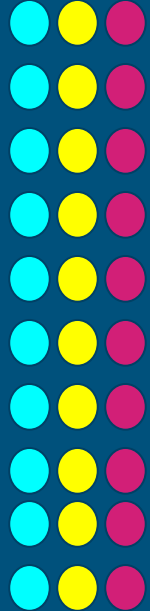


Build your story on the
Part-Whole Mat

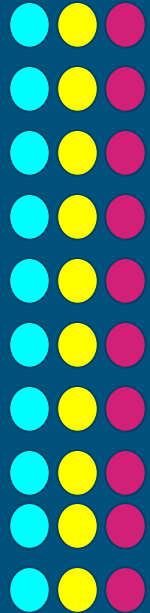
3



3

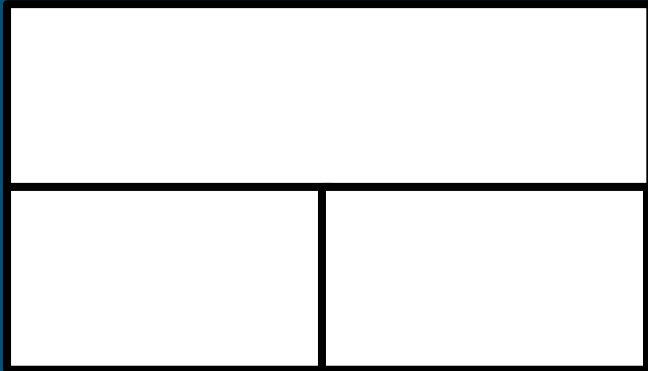
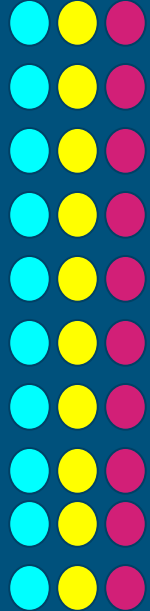


3

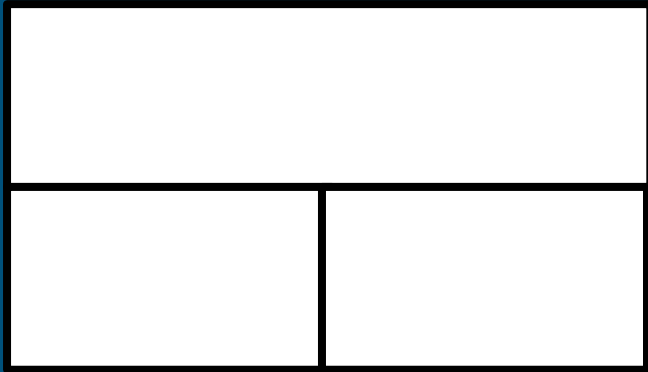
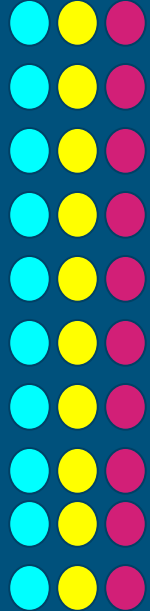




3

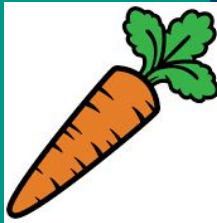


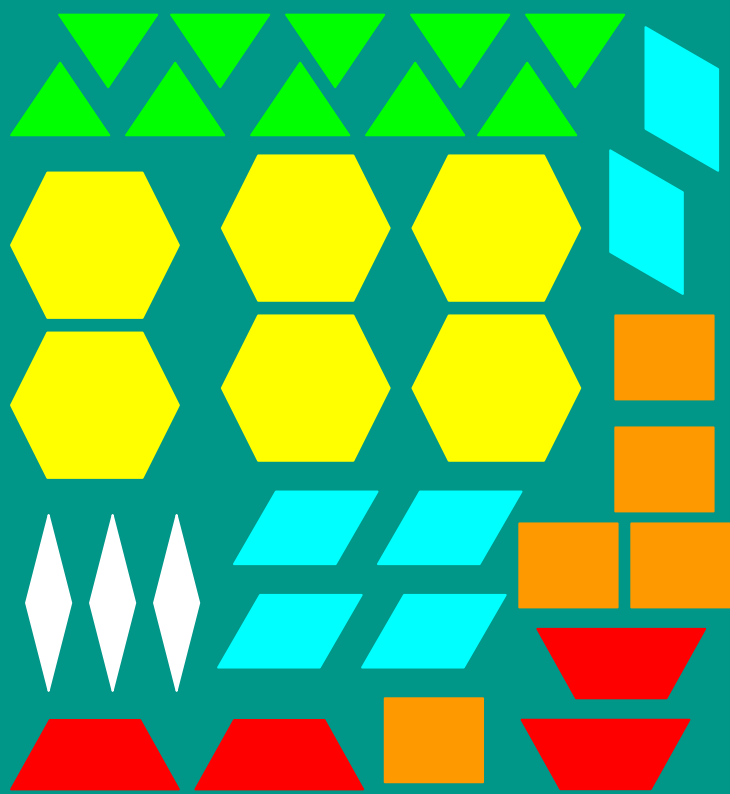
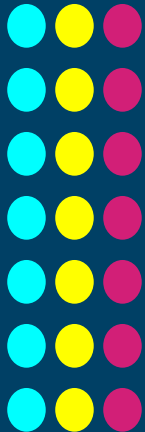
3



How was this
experience like the
other experiences? How
was it different?

Building a story

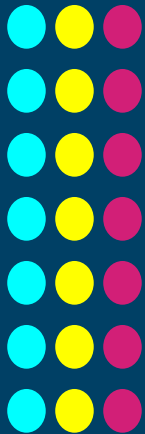




<https://www.didax.com/apps/pattern-blocks/>

Building a story





<https://www.didax.com/apps/pattern-blocks/>

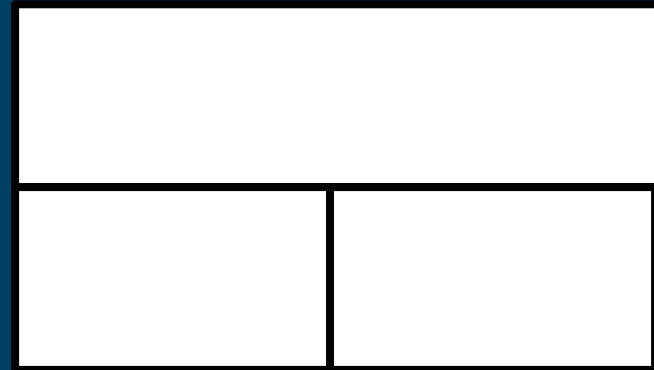
Building a story





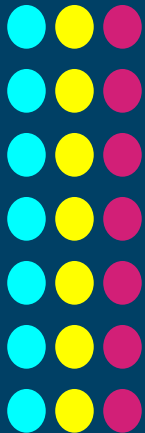
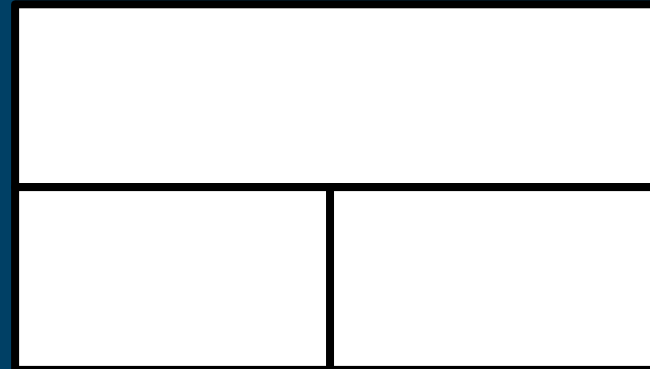
<https://www.didax.com/apps/pattern-blocks/>

Building a story



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Building a story



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Storytelling in the early childhood classroom

- Two pictures provide a beginning and an end to stories
- Part-Whole Mats help us connect the story to the quantities in the story
- Part-Whole Mats help us connect to the action within the story.
- Once children have plenty of storytelling experiences with a focus on beginning, middle, and end then they are ready for a single picture.
- The numbr of the day is a great opportunity for story telling!
- Pattern blocks help us mathematize our world and storytell creatively.