

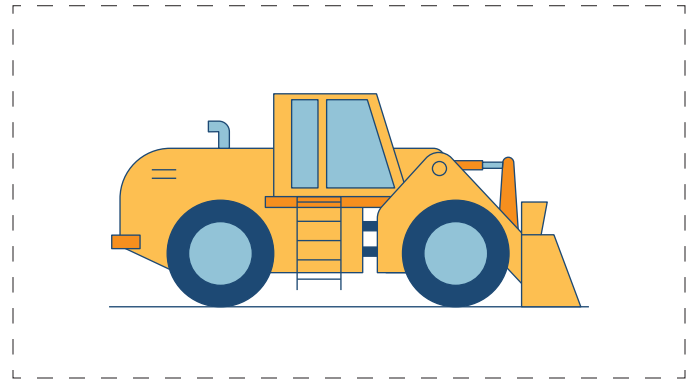
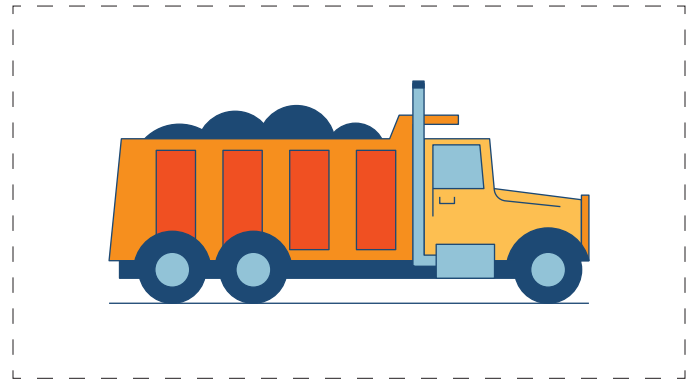
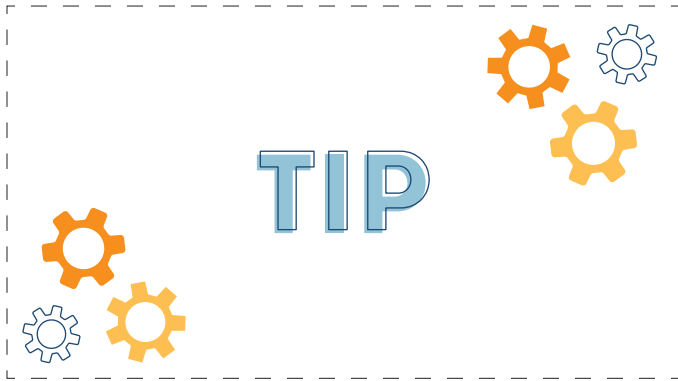
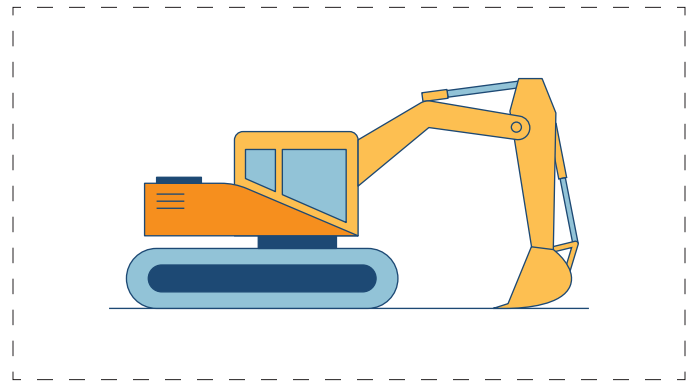
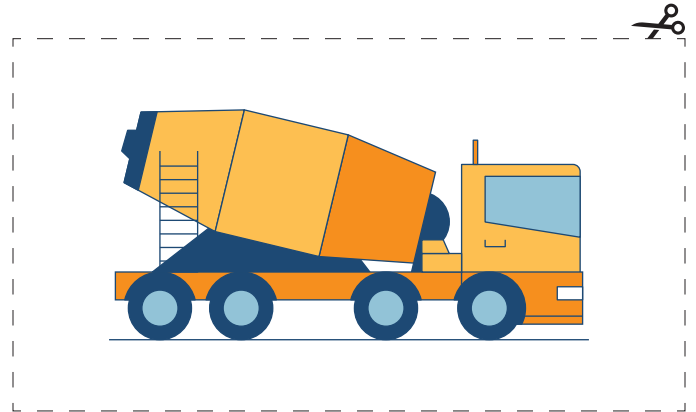
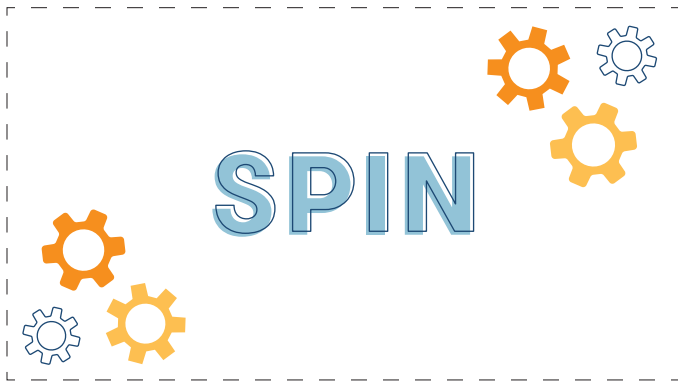
# BIG MACHINE MATCHING GAME

## DIRECTIONS

Match each construction equipment with the right movement.

## TIP

Have kids perform each movement once they make the right match.



# BIG MACHINE MATCHING GAME



**Pair One:** Spin, Cement Mixer

**Pair Two:** Dig, Excavator

**Pair Three:** Tip, Dump Truck

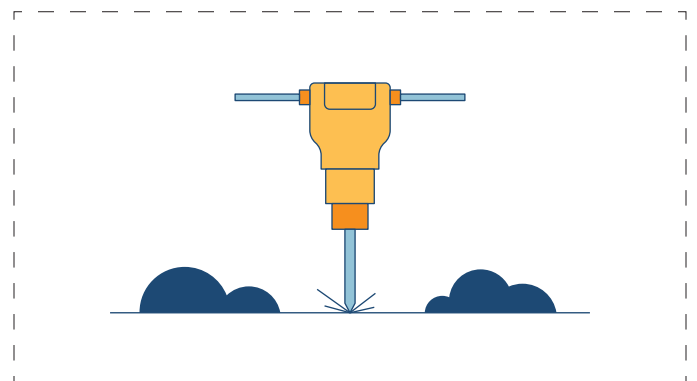
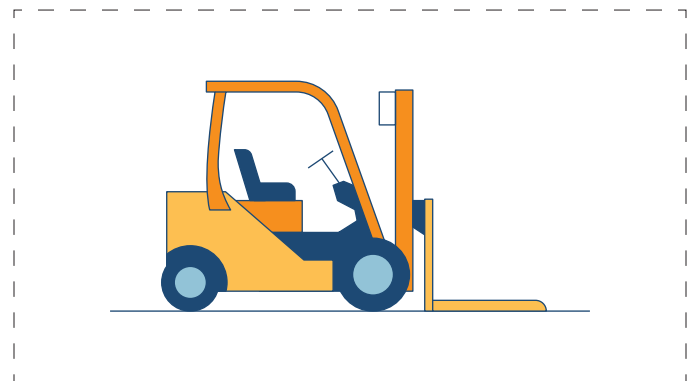
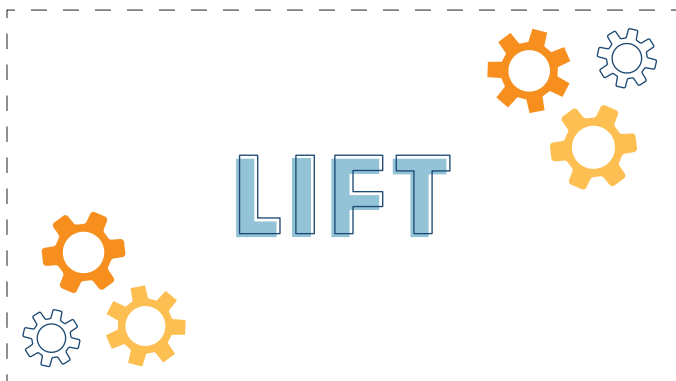
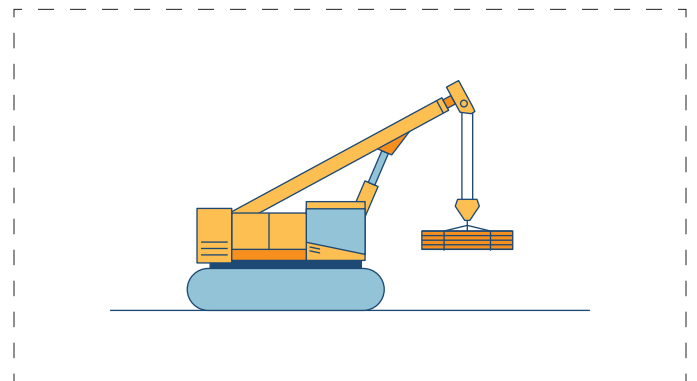
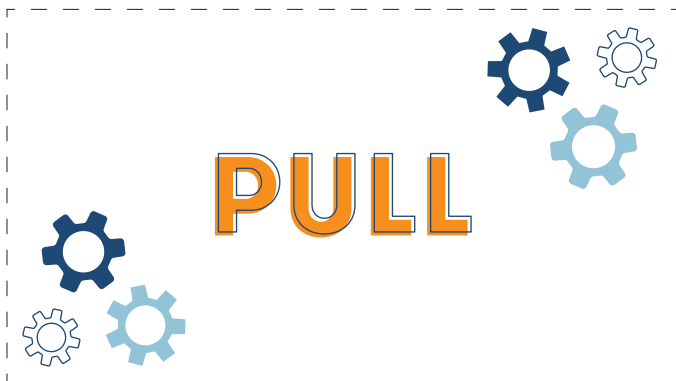
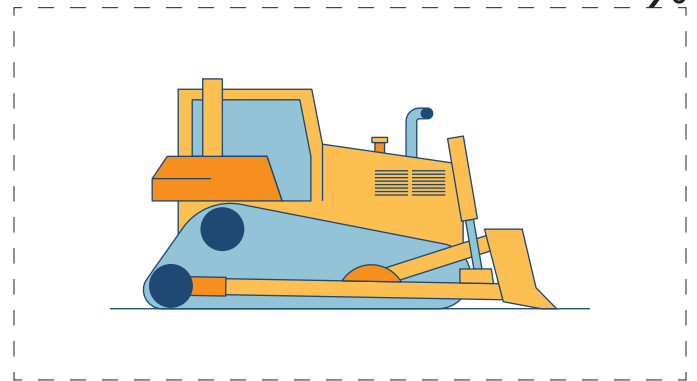
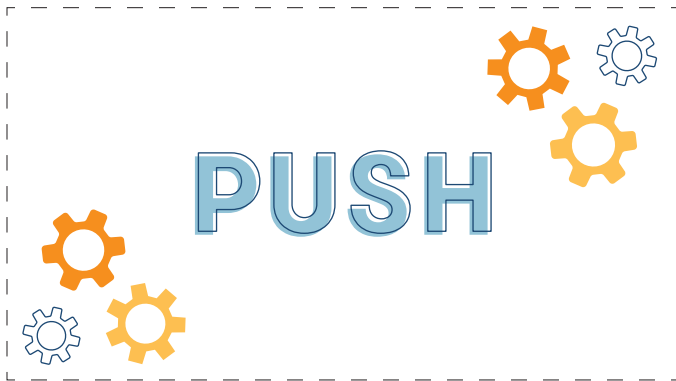
**Pair Four:** Scoop, Loader

**Pair Five:** Push, Bulldozer

**Pair Six:** Pull, Crane

**Pair Seven:** Lift, Forklift

**Pair Eight:** Stomp, Jackhammer



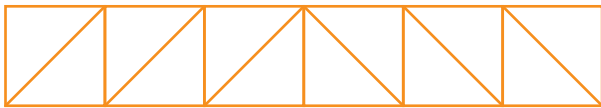
# BRIDGE BUILDING PROJECT

## DIRECTIONS

Build each bridge type by using the following diagram.

1. Copy and draw the bridge design out on paper using a ruler and pencil.
2. Use rubber bands to tie the spaghetti pieces into multiple bunches.
3. Using your diagram as a guide, cut the bunches to different lengths to assemble each section of the bridge
4. Once the lengths are all correct, hot glue gun to glue the ends of each “bunch” of spaghetti to tie them together.
5. Use the hot glue gun to glue all the individual bunches together.
6. Build out the following design for the base and then glue the side components together with it to complete the bridge.

### DESIGN A PLAN FOR THE STRUCTURE OF YOUR BRIDGE

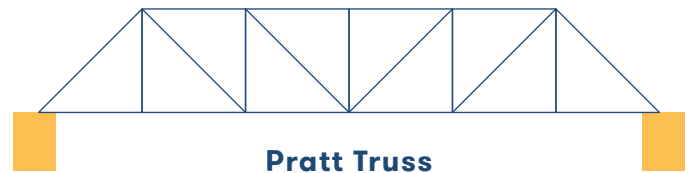


## SUPPLIES NEEDED

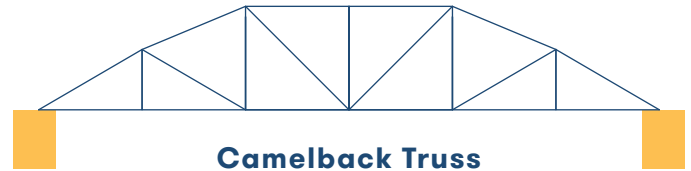
- Uncooked spaghetti
- Hot glue gun
- Pen/pencil
- Ruler
- Paper
- Rubber bands

## TIP

Have kids test the strength of their bridge and placing different materials on it.



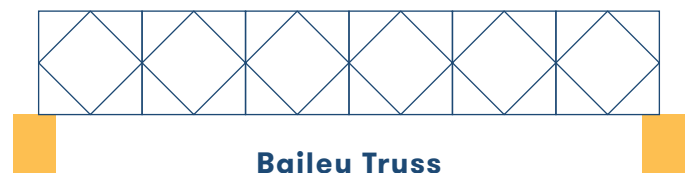
**Pratt Truss**



**Camelback Truss**



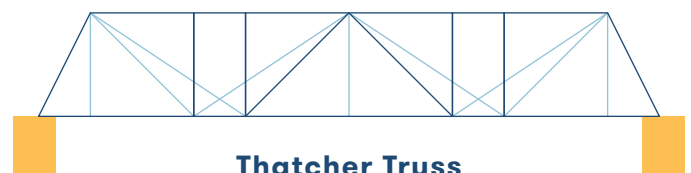
**Baltimore Truss**



**Bailey Truss**



**Pennsylvania Petit Truss**



**Thatcher Truss**

# BUILD MY DREAMHOUSE PROJECT



## DIRECTIONS

Create a blueprint for your dream home.

1. Create copies and print out the desired number of room sections.
2. Cut up each section and tape together to create the house layout.
3. Color code each room.

## SUPPLIES NEEDED

- Scissors
- Crayons
- Tape

## TIP

Have kids list the rooms in their dream home and create a color-coded key.

## Rooms

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---

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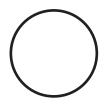
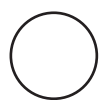
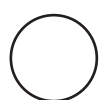
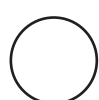
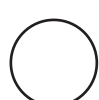



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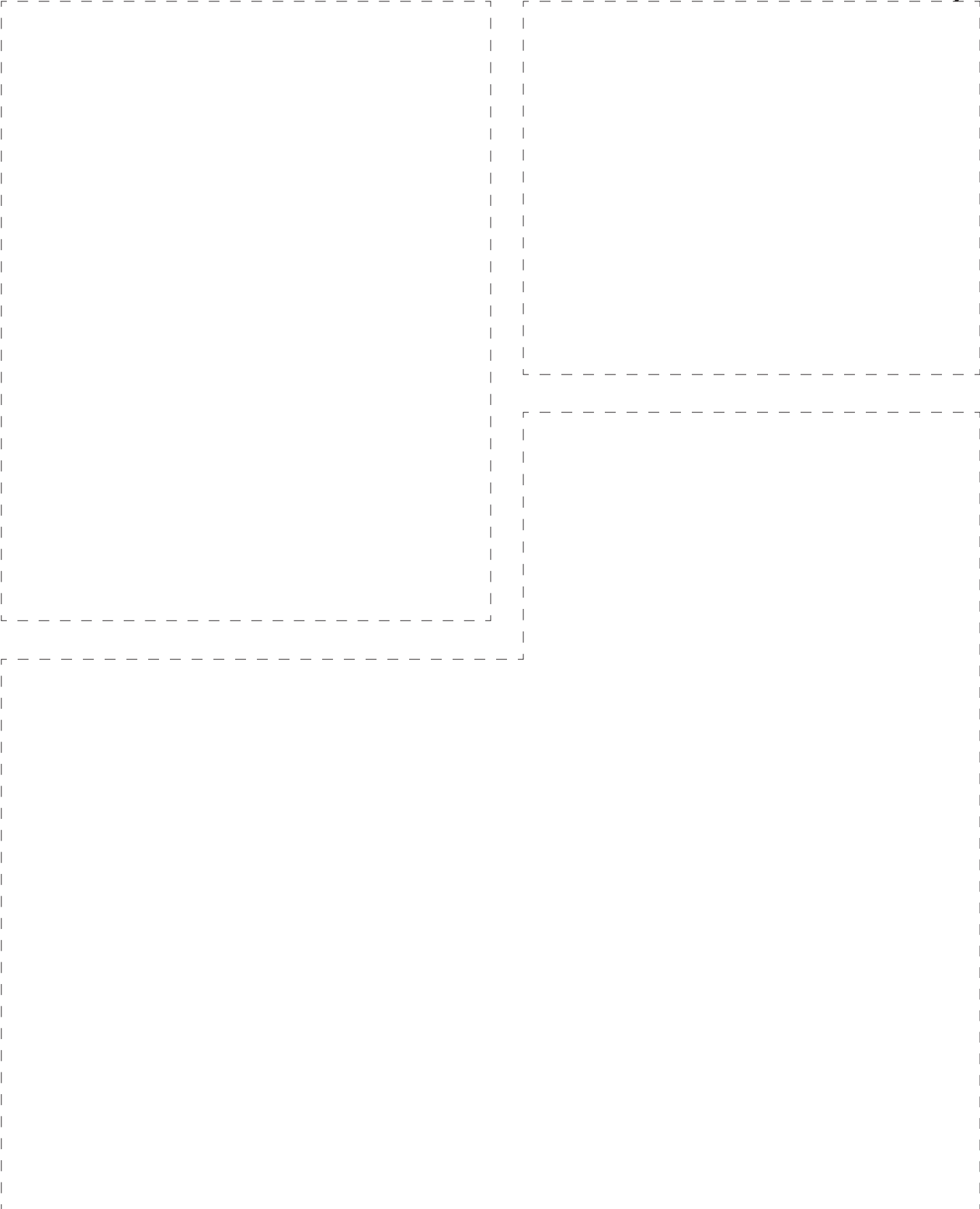
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## Color Code

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# BUILD MY DREAMHOUSE PROJECT



# CONSTRUCTING SHAPES

## DIRECTIONS

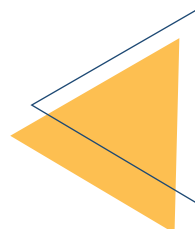
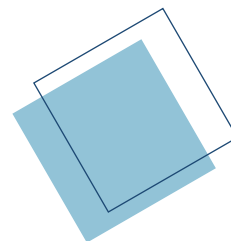
Cut out each flashcard and have kids build the shape or structure using marshmallows and toothpicks.

## SUPPLIES NEEDED

- Mini marshmallows
- Rounded toothpicks

## TIP

Discuss with kids the shapes they are building, colors of the marshmallows, and what toothpicks are made of.



### Build a square

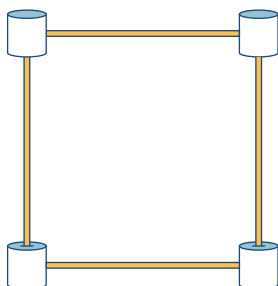
Use



x4



x4



### Build a triangle

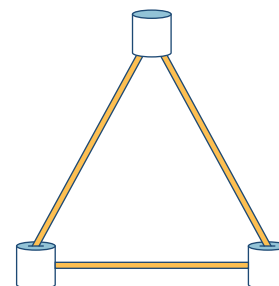
Use



x3



x3



### Build a tetrahedron

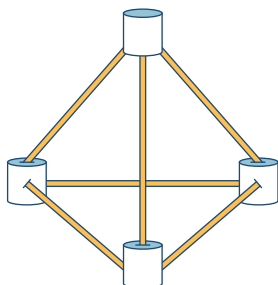
Use



x6



x4



### Build a prism

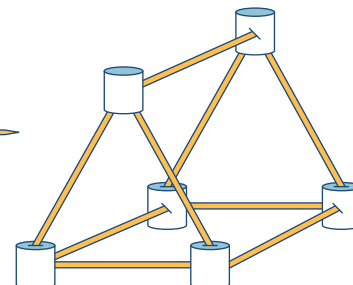
Use



x9



x6



### Build a cube

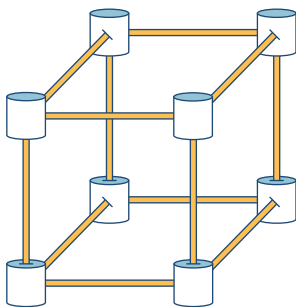
Use



x8



x12



### Build a pyramid

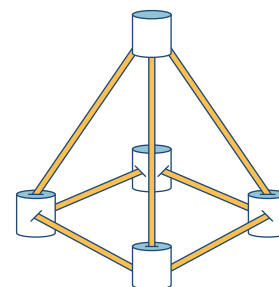
Use



x7



x5



# CONSTRUCTION SCISSOR PRACTICE

## DIRECTIONS

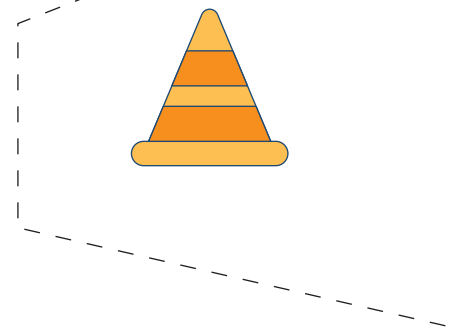
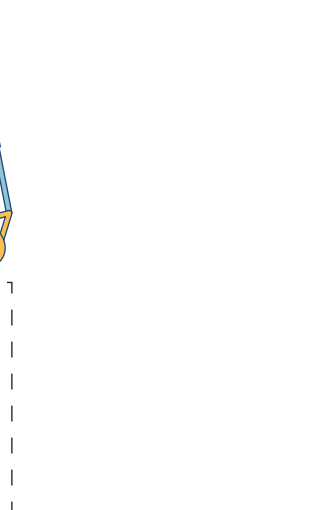
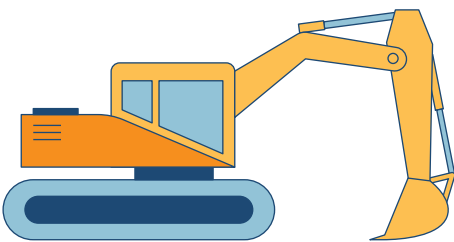
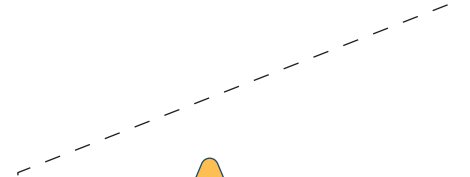
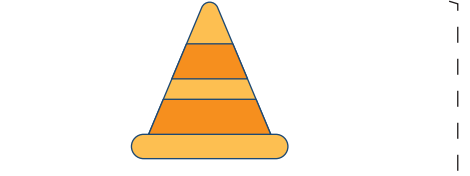
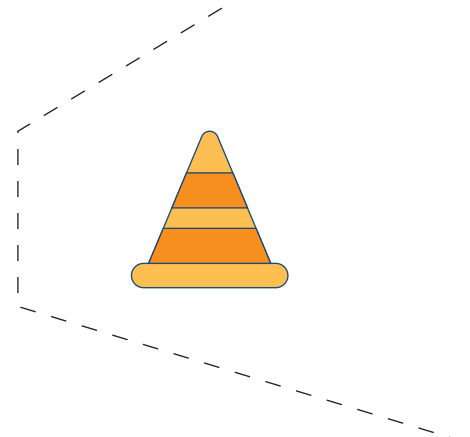
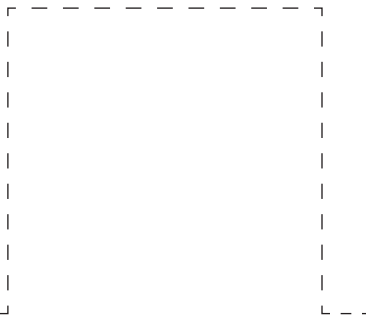
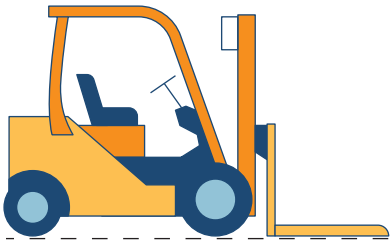
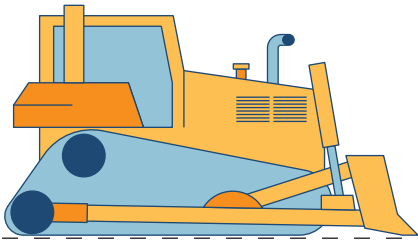
Follow and cut the dotted lines for each construction activity.

## SUPPLIES NEEDED

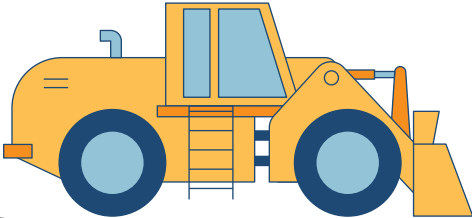
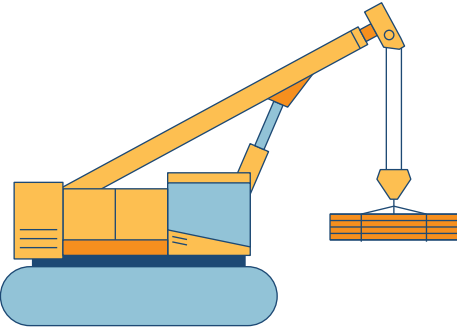
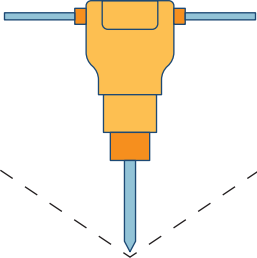
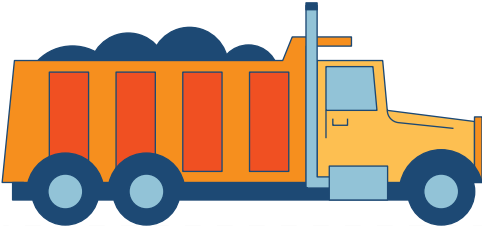
Scissors

## TIP

Discuss with kids what each equipment is used for.



# CONSTRUCTION SCISSOR PRACTICE





# HAMMER THE SYLLABLES

## DIRECTIONS

For each word, hammer the number of syllables and build it using the right number of building blocks.

## SUPPLIES NEEDED

- Toy hammers
- Building blocks



CRANE



HAMMER



CONE



BULLDOZER



TOOLBOX



EXCAVATOR



JACKHAMMER



SCREWDRIVER



# LEGO BUILDING CHALLENGE



## DIRECTIONS

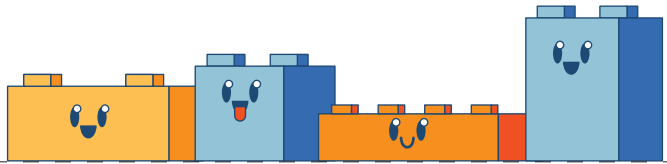
Build and create the item on each flashcard. Use the blank cards to create your own challenges.

## SUPPLIES NEEDED

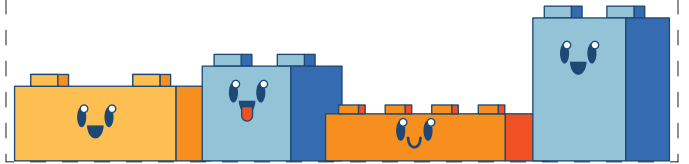
LEGOs



**BUILD A  
CAR**



**BUILD A  
HAMMER**



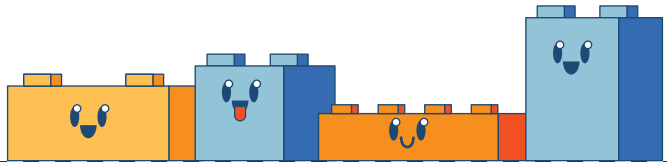
**BUILD A  
SKYSCRAPER**



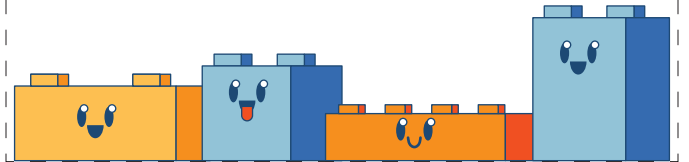
**BUILD YOUR  
FAVORITE ZOO  
ANIMAL**



**BUILD AN  
AIRPLANE**



**BUILD A  
ROBOT**



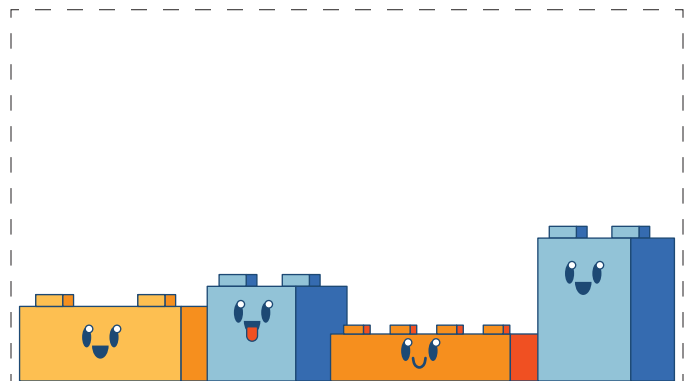
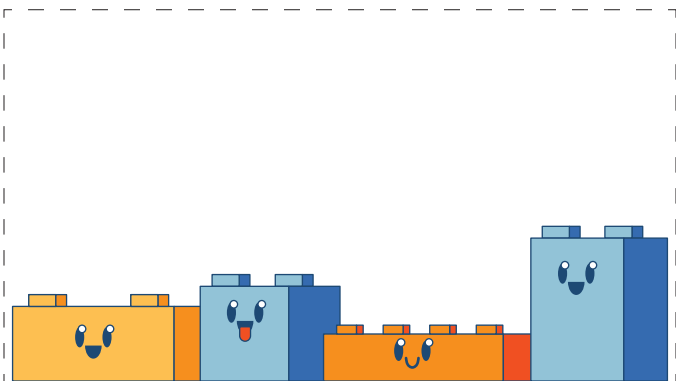
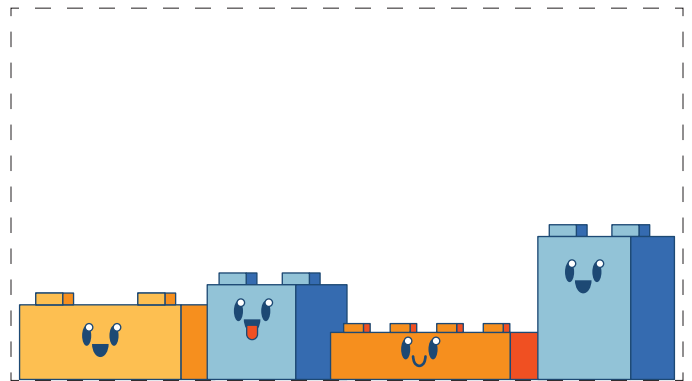
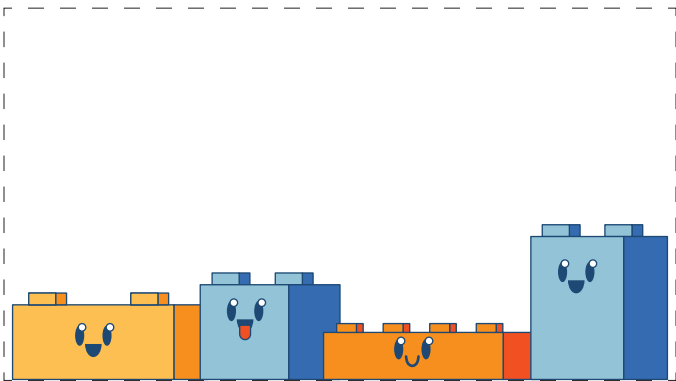
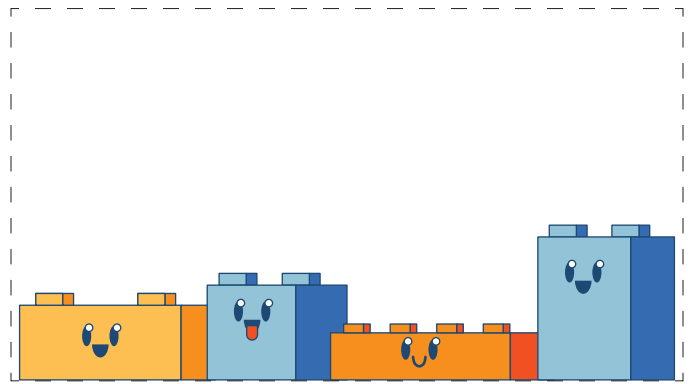
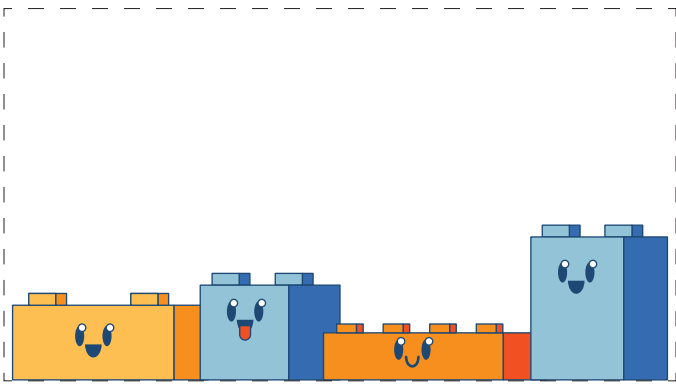
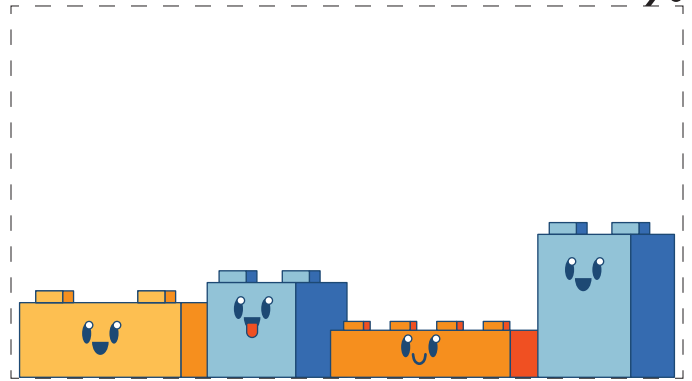
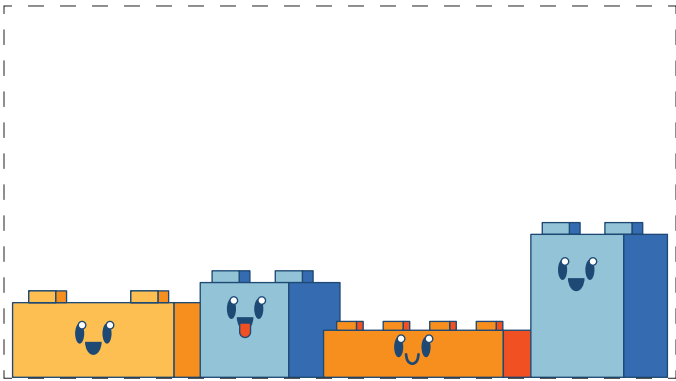
**BUILD YOUR  
HOUSE**



**BUILD A  
CASTLE**



# LEGO BUILDING CHALLENGE



# NEIGHBORHOOD UNDER CONSTRUCTION

## DIRECTIONS

Have kids work as a team to construct their own neighborhoods.

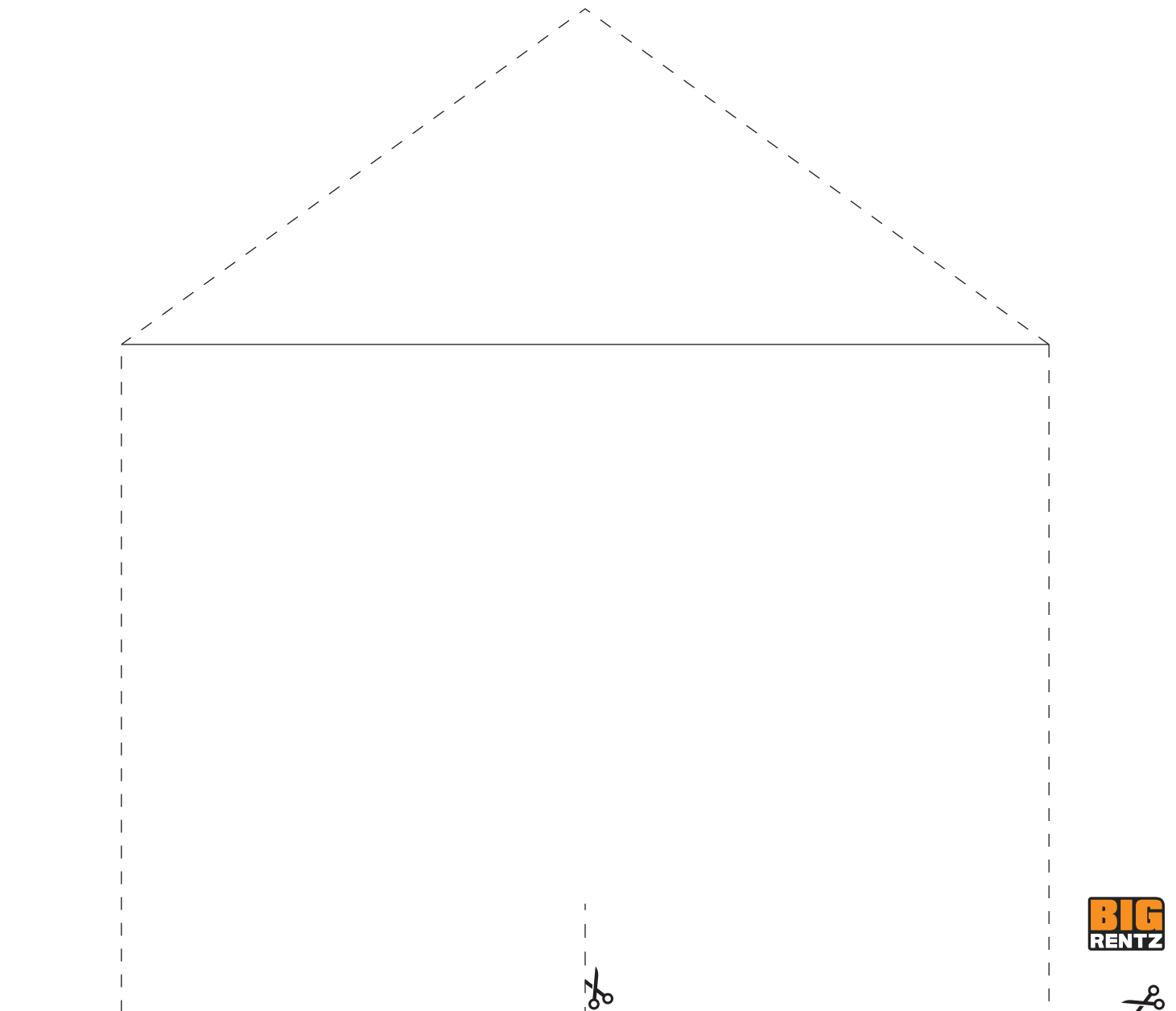
1. Cut out the house outline below.
2. Draw a house design.
3. Glue the house on a piece of cardboard that's cut to the size of the house.
4. Cut out a slot to create a stand for the house.
5. Insert a piece of cardboard in the slot to create a stand for the house.
6. Arrange the house to form a small neighborhood.

## SUPPLIES NEEDED

- Scissors
- Crayons
- Cardboard
- Glue

## TIP


Ask kids to explain their house design and list the steps they think are needed to build their house on the work order sheet prior to building. Have kids cut out and prop up the construction signs.



# NEIGHBORHOOD UNDER CONSTRUCTION

## WORK ORDER FORM





### WORK ORDERS


\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_


## NAME BADGES






**Name**  
\_\_\_\_\_

**Job Title**  
\_\_\_\_\_



**Name**  
\_\_\_\_\_

**Job Title**  
\_\_\_\_\_







**Name**  
\_\_\_\_\_

**Job Title**  
\_\_\_\_\_

## CONSTRUCTION SIGNS





# BUILD WITH NUTS & BOLTS



## DIRECTIONS

Build "10" using the correct number of materials.

## SUPPLIES NEEDED

Nuts and bolts



BUILD  
10














BUILD  
10












# BUILD WITH NUTS & BOLTS





   



   



   



   

Create your own numbers for the flashcards below

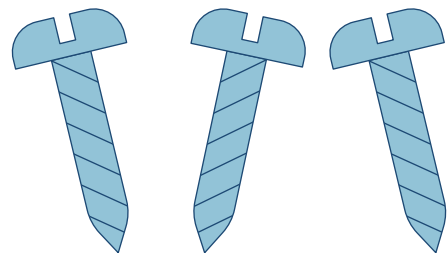
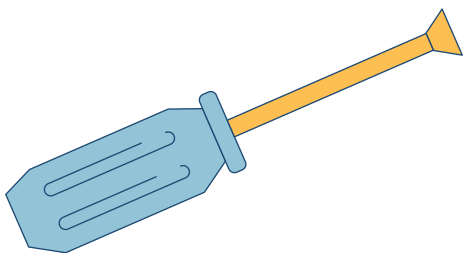
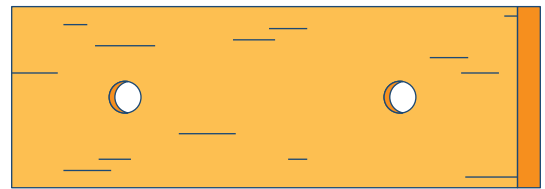
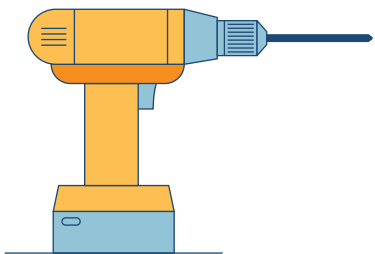
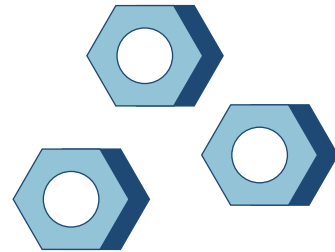
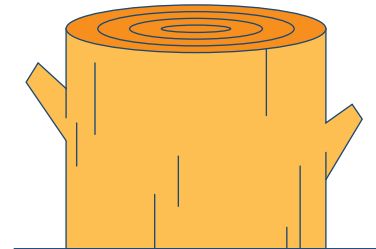
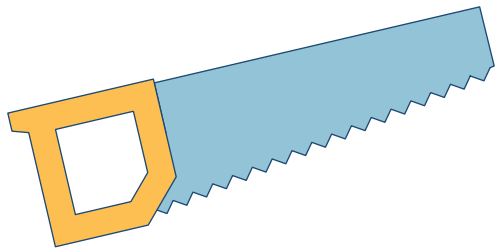
# TOOLS MATCHING GAME

## DIRECTIONS

Match each tool with its right use.

## TIP

Demonstrate the tool after kids make a successful match.





# TOOLS MATCHING GAME

**Pair One:** Saw, Wood

**Pair Two:** Wrench, Leaky Faucet

**Pair Three:** Power Drill, Wood

**Pair Four:** Screwdriver, Screw

**Pair Five:** Hammer, Nail

**Pair Six:** Pliers, Metal

**Pair Seven:** Tape Measure, Cabinet

**Pair Eight:** Wire Cutter, Wire

