

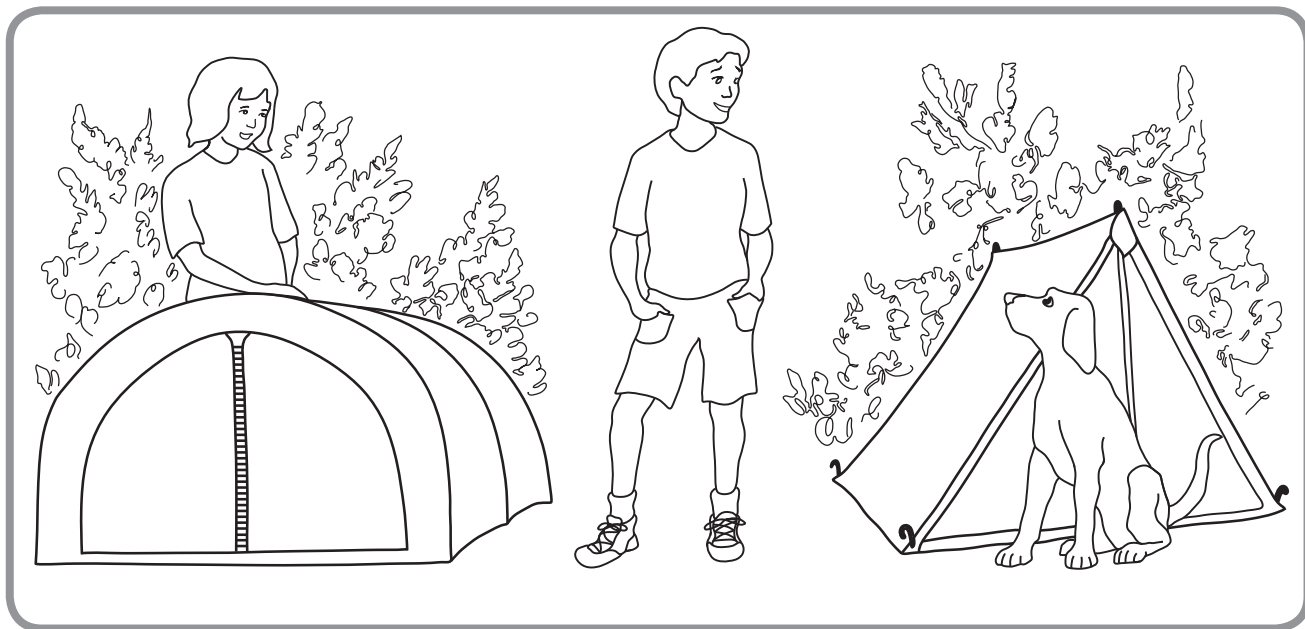
Dear Family,

Today we did an activity called “How Many Friends?” from a STEM project called *Pam’s Camping Adventure*. STEM stands for **S**cience, **T**echnology, **E**ngineering, and **M**ath. This activity—the first of four—introduced children to this mathematics concept:

- A model is one way to find out how shapes fit together.

Let your child tell you what happened in the activity. Have your child use the diagram on the back of this letter. As your child tells you about the activity, listen for words that describe position, such as **beside**, **behind**, **in front of**, **next to**, **in the corner**, and **in the middle**.

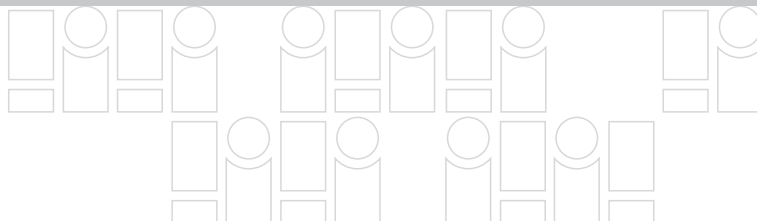
If your child needs help in telling you about the activity, use prompts such as *What was the shape of the tent floor? What was the shape of the sleeping bags? Where did you put the sleeping bags? How many sleeping bags could you fit in Pam’s tent?*



Try This at Home: Identifying Position

Have your child look at the picture. Ask your child questions about the relative positions of the objects, such as *Where is the girl? Where is the dog? Where is the boy?* Encourage your child to use position words such as **beside**, **behind**, **in front of**, **next to**, **in the corner**, and **in the middle**.

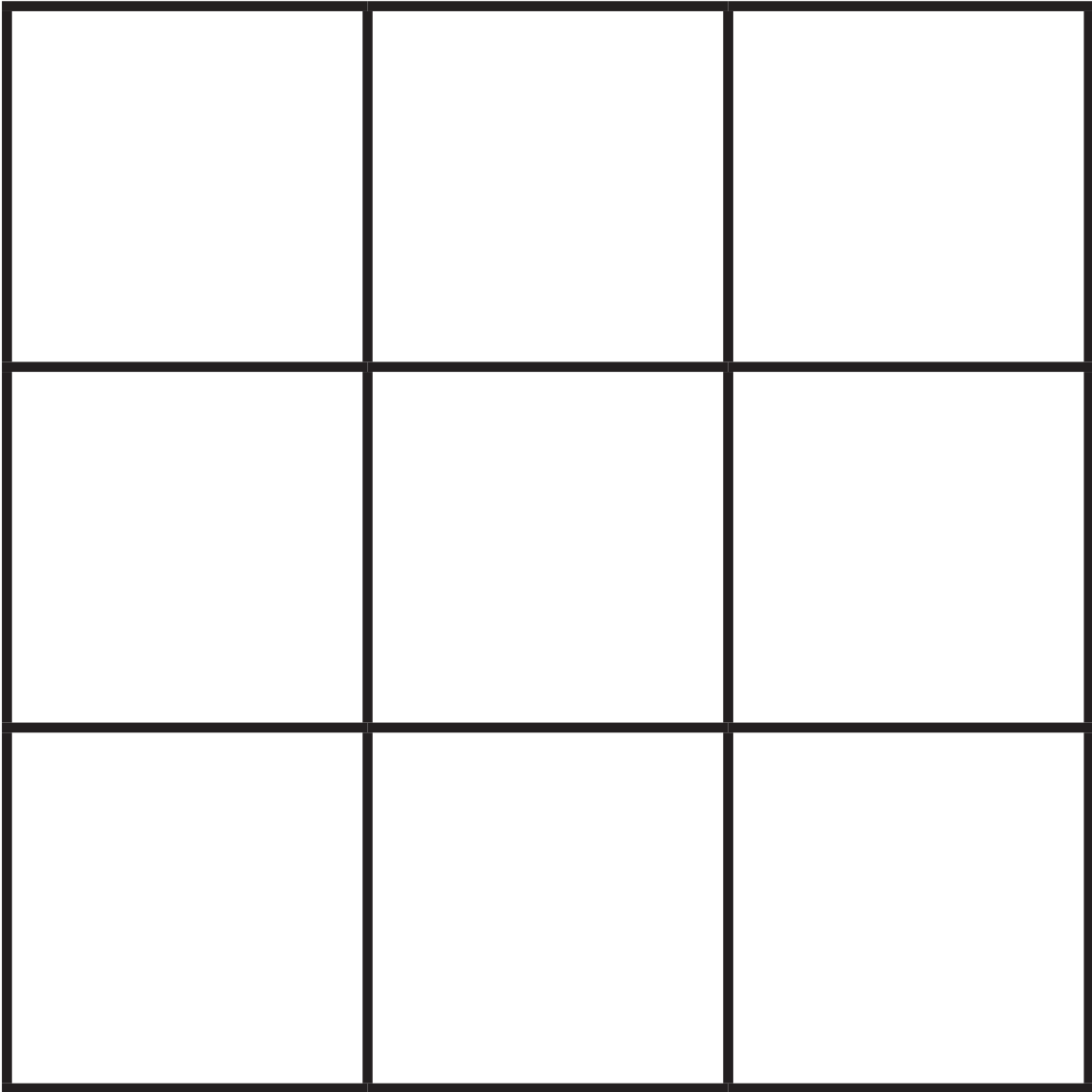
This STEM project has been developed in partnership with Texas A&M University.



Tent Floor Plan

We arranged sleeping bags in different positions to see how many can fit into Pam’s tent.

Tent Floor



How many sleeping bags fit?

- 1
- 2
- 3
- 4
- 5
- 6

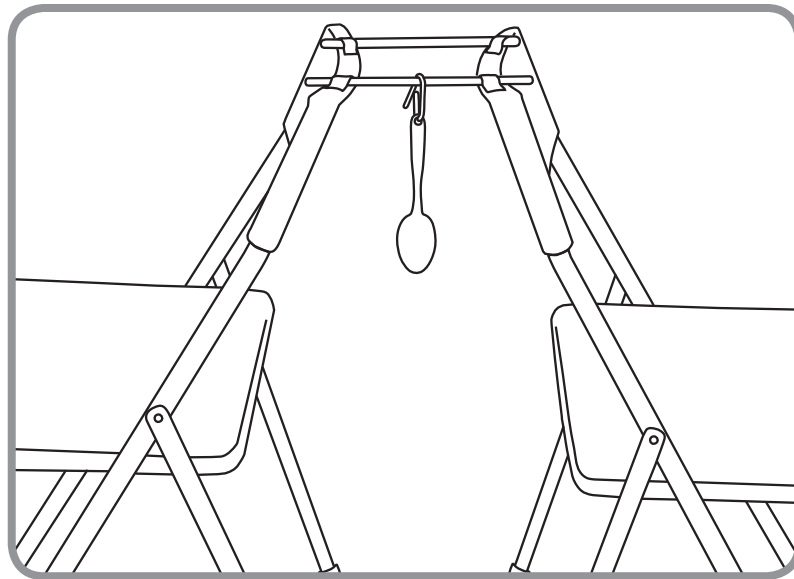
Dear Family,

Today we did an activity called “Which Pole Holds More?” from *Pam’s Camping Adventure*. This activity introduces children to these science and mathematics concepts:

- Scientists do tests to compare different materials; and
- A graph is one way to compare quantities, or how many.

Let your child tell you what happened in the activity. Have your child use the graph on the back of this letter to help explain how we tested three different kinds of tent poles. As your child speaks, listen for words that tell how many, such as **more**, **most**, and **fewer**.

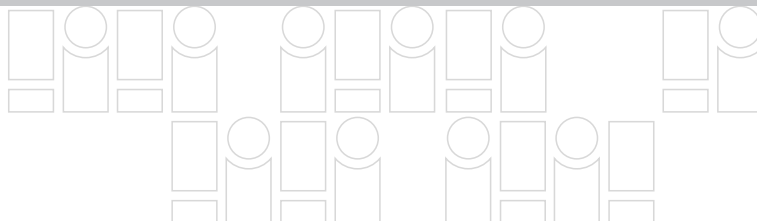
If your child needs help in telling you about the activity, use prompts such as *What kind of tent poles did you test? How did you test the different tent poles? Which kind of tent pole was best for building the tent? How many backpacks did the pole hold?*



Try This at Home: Comparing Straws

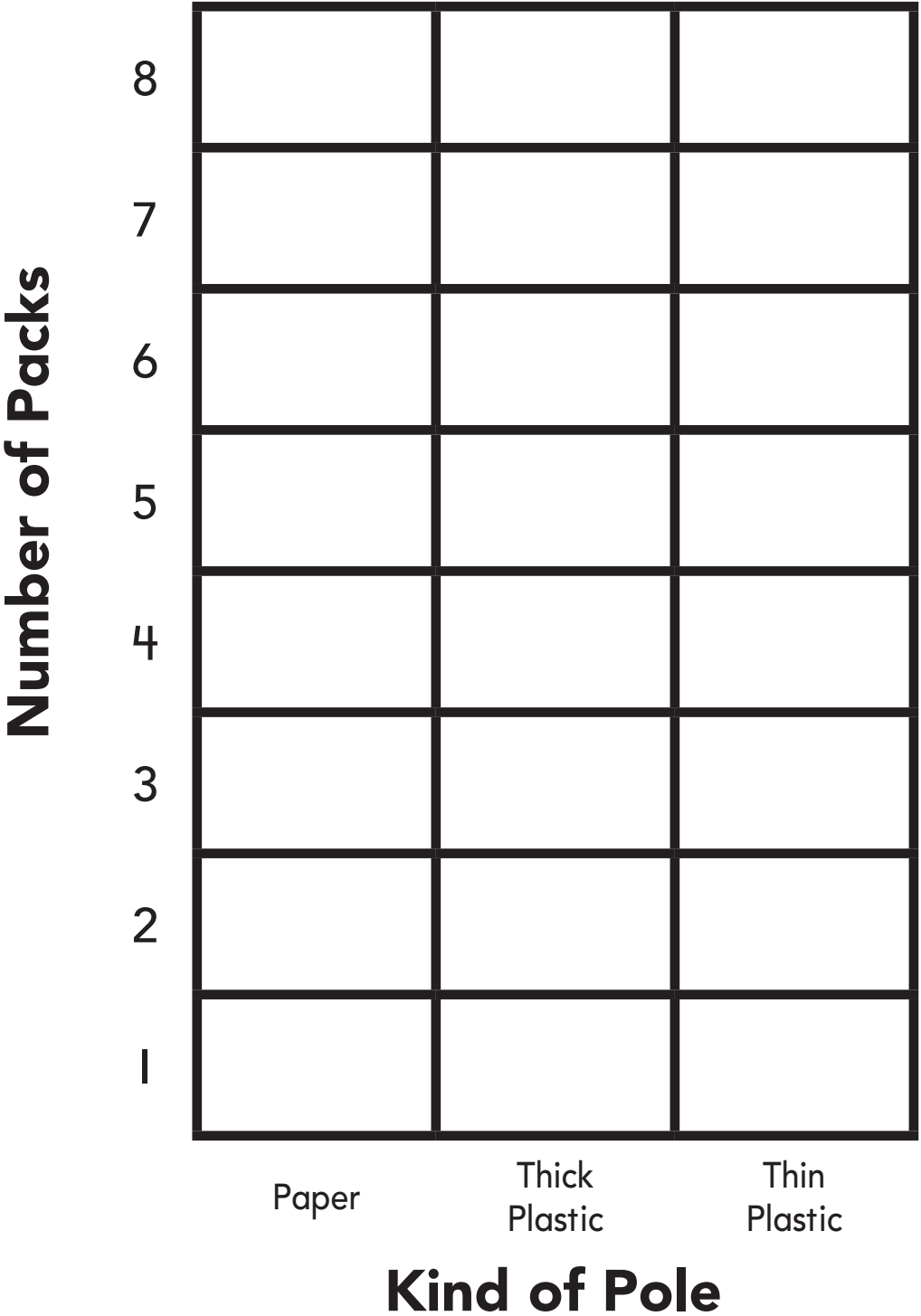
Collect two different kinds of straws, such as paper and plastic straws or straws of different diameters. Guess together which straw can hold more weight. Set up a level testing station by putting the backs of two chairs about 5 inches apart. Place the straws between the chairs. Tape their ends in place. Use paperclips to hang small household objects, such as kitchen spoons, from the straws. Ask: *Which straw held more? Was your guess correct?*

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How Many Did It Hold?

We tested to see how many packs each kind of tent pole can hold.



Dear Family,

Today we did an activity called “Placing Pam’s Packs” from *Pam’s Camping Adventure*. This activity introduces children to this engineering concept:

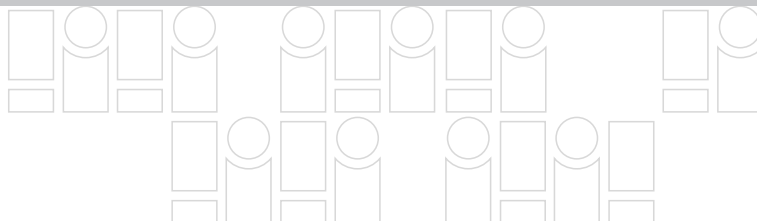
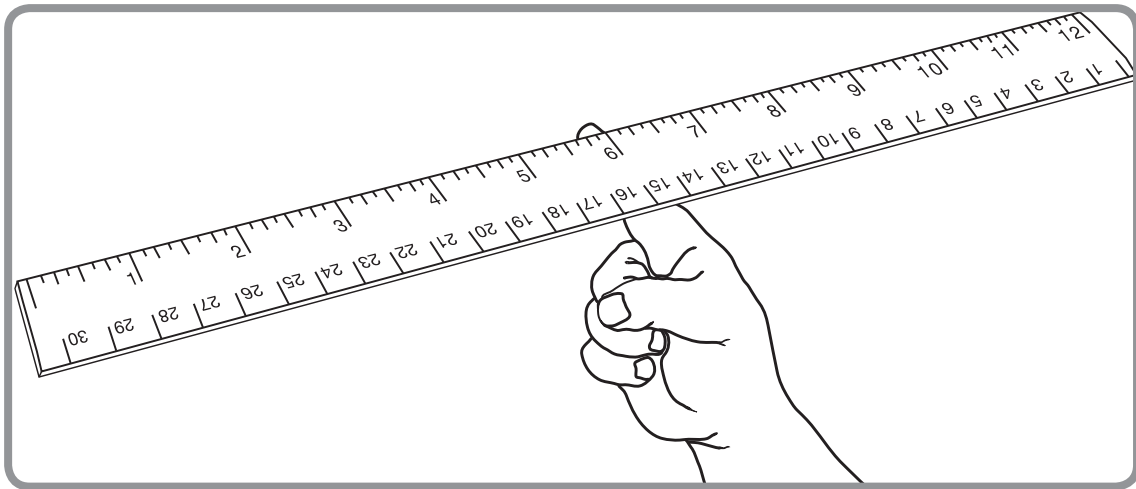
- How stable a structure is depends on how weight is balanced.

Let your child tell you what happened in the activity. Have your child use the diagram on the back of this letter to explain what we did. As your child speaks, listen for the words **stable**, **weight**, and **balance**. Also listen for comparison words, such as **higher**, **lower**, **more**, and **less**.

If your child needs help in telling you about the activity, ask questions such as *What did you hang on the tent frame? Could you hang all the packs on one side of the tent? Was it better to put the packs close together or to spread them out over the frame?*

Try This at Home: Fingertip Balance

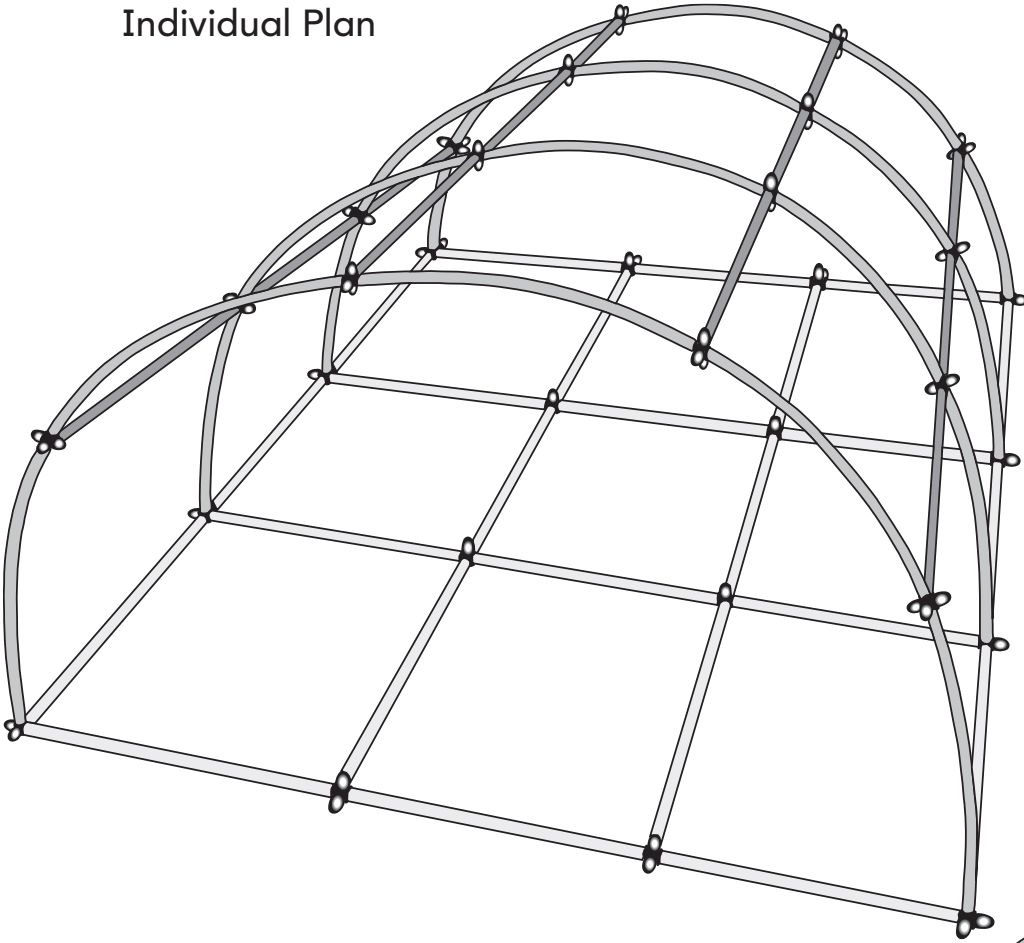
Gather a ruler and a spoon. Talk about how the items are alike and how they are different. Then have your child balance each object on his or her index finger. Observe how the items are placed in order for them to balance. Help your child to observe whether the object’s weight was distributed evenly (ruler) or whether it was weighted more heavily toward one end (spoon).



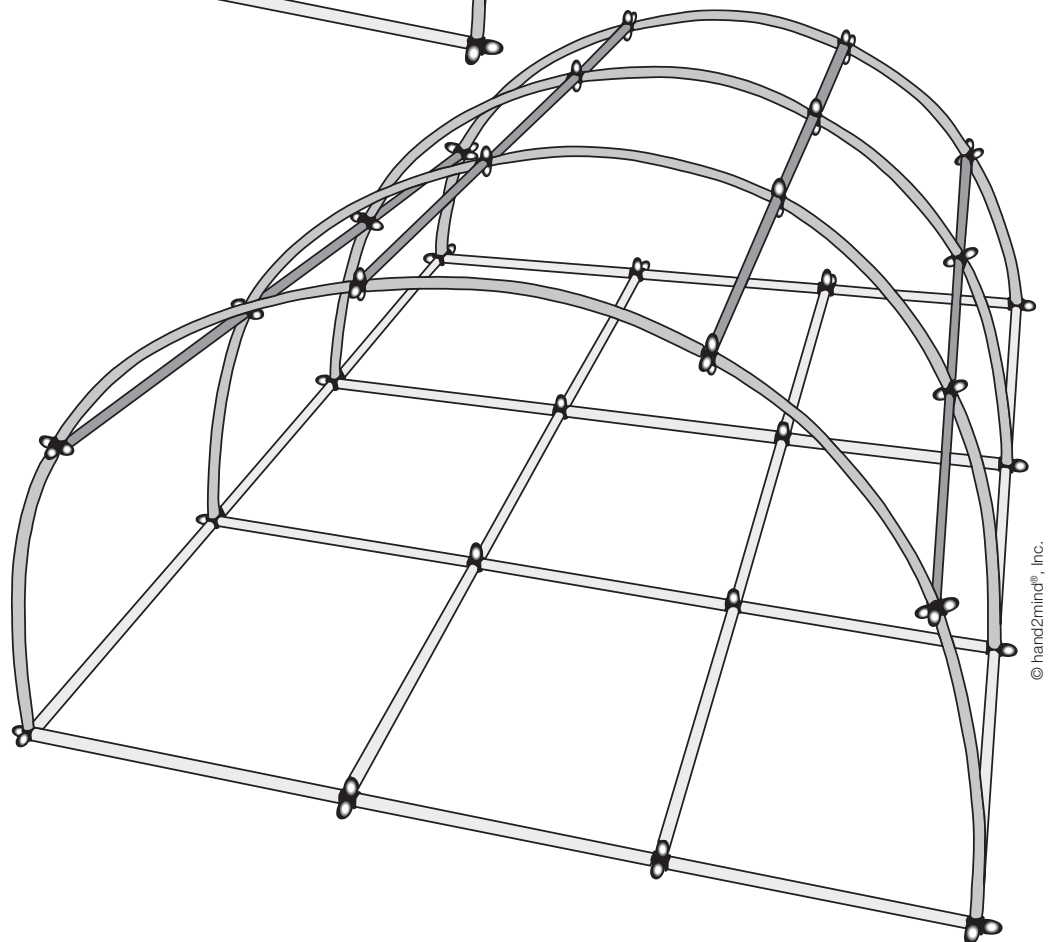
Where to Put the Packs?

We planned where to hang the packs in the tent.

Individual Plan



Class Plan



Dear Family,

Today we did an activity called “Oh No! Lost Poles!” from *Pam’s Camping Adventure*. This activity introduces children to this math and science concept:

- The parts of a structure work together to help it be stable.

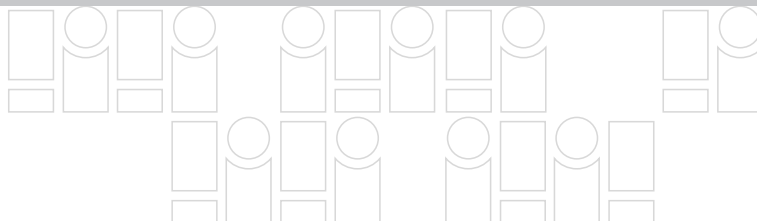
Let your child tell you what happened in the activity. Have your child use the diagram on the back of this letter to explain what we did.

Listen for these words that describe the different parts of the tent frame: **base**, **arch**, and **beam**. Also listen to words that tell about position, such as **top**, **bottom**, **above**, **below**, **next to**, and **corner**.

If your child needs help in telling you about the activity, ask questions such as *What did you remove from the tent? Was it better to remove poles from the top or the bottom of the tent? Could you remove poles that were right next to each other?*

Try This at Home: Taking Away the Pieces

Make a simple structure with blocks (include several blocks that are not supporting weight). Then ask your child to remove individual blocks. How many blocks can be removed before the entire structure collapses? Encourage your child to explain his or her reasons for removing each block.



Take Away Poles

We tested to see which two poles could be removed without changing the shape of the tent. This is one solution we found.

