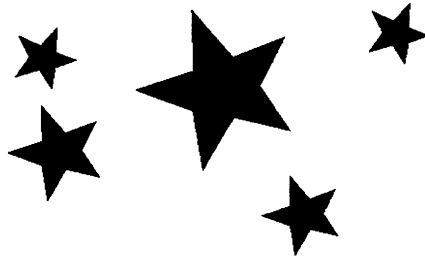


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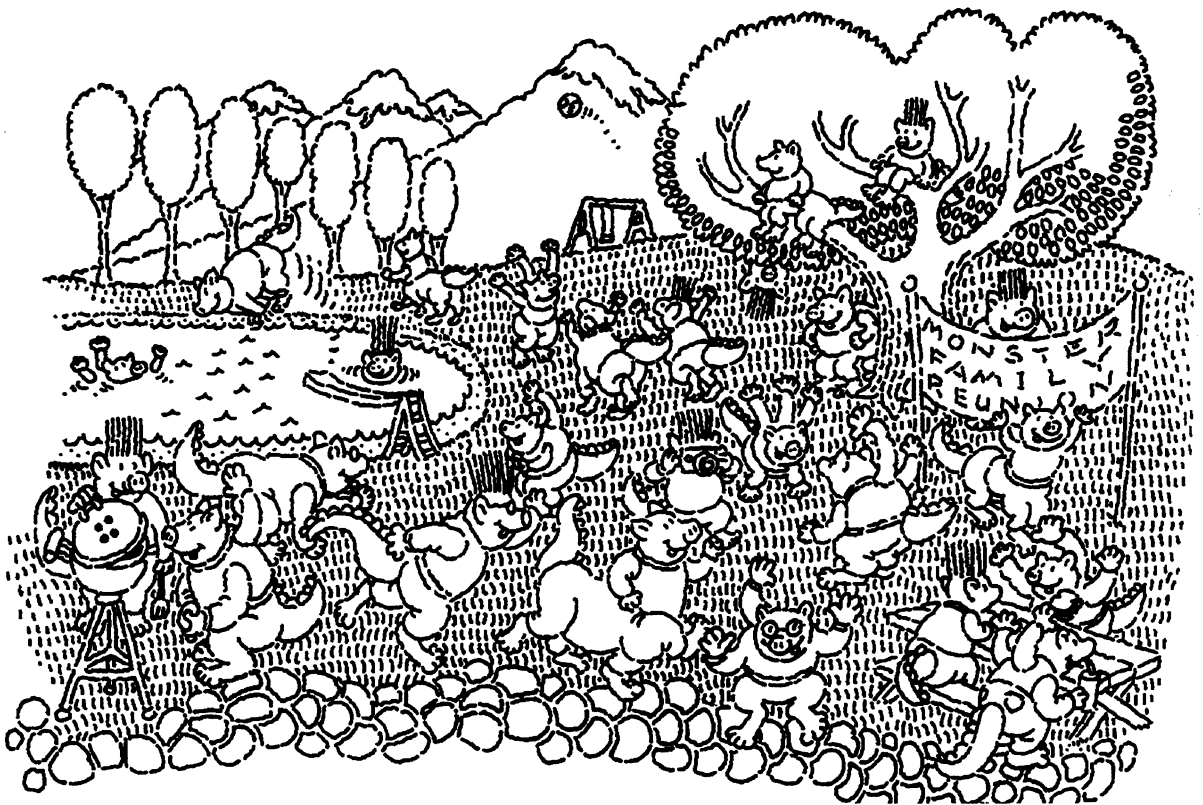


Monsters, Monsters, Everywhere

YOU NEED:

- ★ A sheet or two of plain paper
- ★ Something to write with

Welcome to the Monster family reunion! The Monsters are a very large family, with three separate branches. Can you find the monsters that belong to each of the three branches of the family? Look for something that makes each group different from the others.



Explain how you recognised each branch of the family. What does each group have in common?

When you grouped the monsters by what they looked like, you placed them in **sets**. A set is a group of things with something in common. For example the group of monsters with three arms is a set. Let's call them Branch 1. How many monsters are in Branch 1 ?

Now look at the picture again. The monsters in Branch 1 can also be grouped by what they are doing. Let's count them.

- ★ How many monsters in Branch 1 are eating?
- ★ How many monsters in Branch 1 are swimming?
- ★ How many monsters in Branch 1 are playing baseball?

When you grouped the Branch 1 monsters in smaller groups—by what they were doing—you placed them in **subsets**.

On a separate sheet of paper, draw your own Monster family reunion. Think

of three different sets of monsters doing at least three different picnic activities. How weird can you make your monsters? Be sure that you show some fantastic Monster family features!

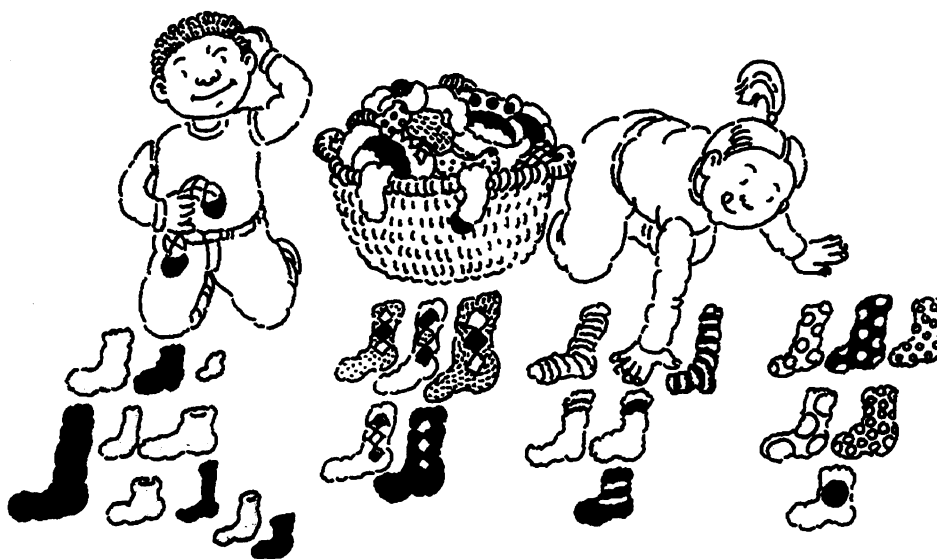
Now go into a room in your house, such as the kitchen or your bedroom. Look around at what you see in drawers and cupboards or on shelves. Can you put the objects you see in sets? Remember that objects can be grouped in many ways—by how they look, what they do, what they sound like and what they are made of.

Make a list of things in three sets. Can you group your sets further into subsets?

Here is an example. In the Monster family cupboard, you would see caps (set). Some of the caps have stripes and some have stars (subsets) .

Now go to work looking for sets and subsets in your own house!

When you have finished your lists ask your friends and family members what sets and subsets they can find in your house. You may be surprised at what they see!



Ship-Shape Shapes

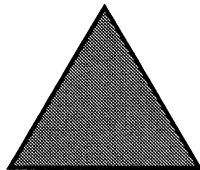
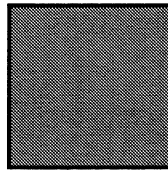


YOU NEED:

- ★ Several sheets of plain paper
- ★ Scissors
- ★ Something to write with
- ★ A clothes hanger
- ★ Thread
- ★ Glue

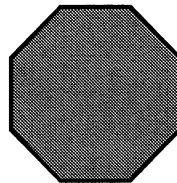
Geometry is the study of the shape, size, and position of geometric figures. The world is filled with geometric shapes. Take a look around, and you'll see. Your house has rectangular walls, and maybe a triangular roof. The wheels on your bicycle are round.

Do you recognise this shape?



How about this one?

Have you seen this shape before?



Of course you recognise the square and the triangle. The shape like a stop sign is a hexagon. Now look at those shapes again and answer this question: If you folded each shape in half, would its sides match each other exactly?

Take a guess. Then trace each shape on a separate sheet of paper and cut it out. Fold each shape in half and test out your prediction.

Since you can fold each of these shapes in half and the halves are exactly the same, we say these shapes are symmetrical.

