Ranger Rick Zoobooks Activities

KANGAROOS

Zooworks®

Archer Falk, age 7

Nathan Best, age 6

Samuel Brandl, age 12

Around the hill and through the glen,
My mommy takes me—hop hop hop—
She never stops!
I am in a pouch, comfy and clear from danger.
I think you have figured out,
I am a kangaroo.

Olive Wright, age 9

Neve Ward, age 11

Kangaroos can hop.
Kangaroos can jump.
Kangaroos can jump over a bump.

Monet Hymas, age 7

Sydney Ason, age 10

Evelyn Grimmer, age 9

One morning Kangaroo woke up. He was delighted to get a nice sip from the pond but a frog was there. Kangaroo had never seen a frog. The frog could jump higher than the kangaroo because it was lighter. The kangaroo was upset. The frog was mad because the kangaroo had a pouch. They decided to have a contest to see who could do the best trick. Frog did a very high back flip! Kangaroo twirled while jumping very low! Then Frog saw the Kangaroo's eyes were full of tears. Kangaroo never had a friend before. So they became friends.

Clara Sutter, age 6

Eric Cardona, age 8

Look for Activity Pages Online!

Visit **rangerrick.org/ZBactivities** to find fun kangaroo activities to print or download.

Plus at rangerrick.org you'll find:
- Interactive games
- 50 pictures, poems and stories from kids like you
- Animal videos

Would you like to see your work published in ***Ranger Rick Zoobooks***?

Here's what to do: Go to **www.rangerrick.org/zooworks** for rules and deadlines.

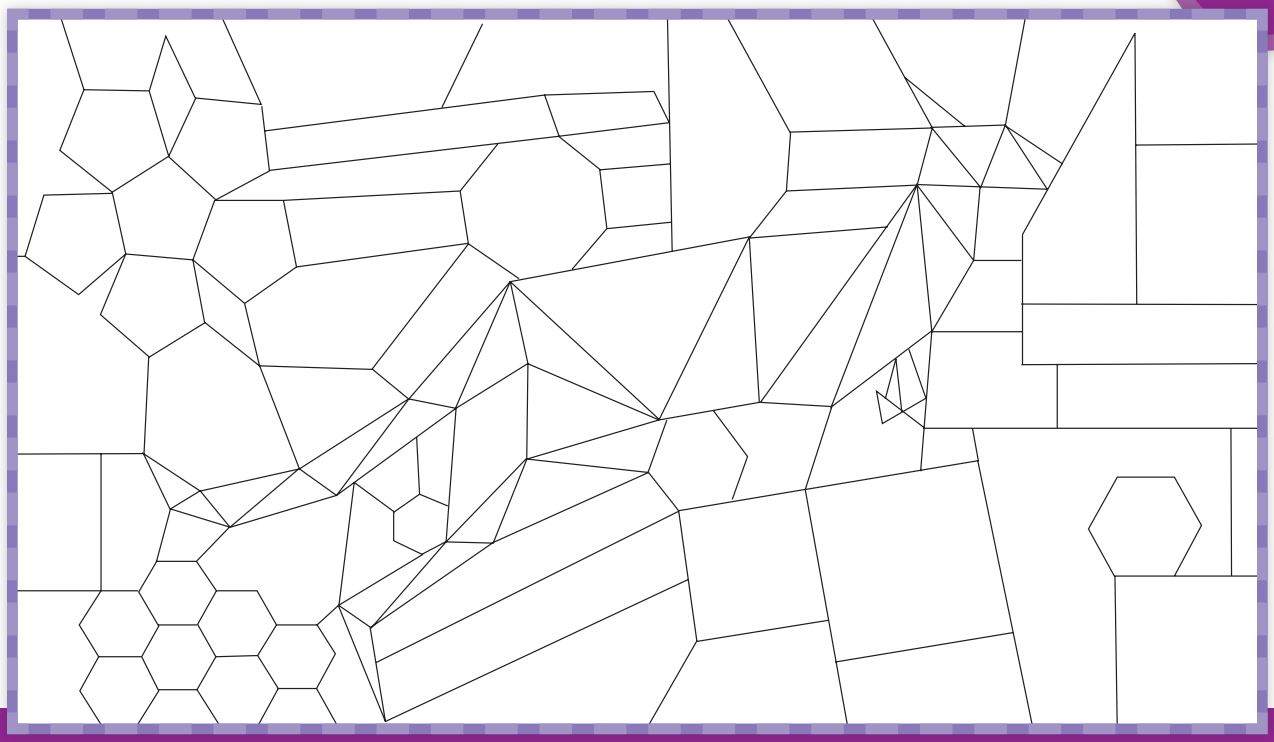
We want to see your original poem, story, or drawing by November 9, 2021 for "**Dolphins**" or December 8, 2021 for "**Cheetahs**."

Another ANGLE on Kangaroos

A kangaroo is hiding in the mangle of polygons below. "What's a polygon?" you ask. It's a many-sided shape, such as a triangle, rectangle, square, or hexagon.

You can use what you know about polygons to complete the puzzle. If you color only the three-sided polygons, you will uncover the hidden kangaroo.

Next Step



Challenge: The sides of a regular polygon are all the same length. How many regular polygons can you find and name in this puzzle?

KANGAROO Bark Art

Kangaroos are among the favorite subjects of indigenous artists in Australia. Using natural materials to make their paints, these artists create beautiful bark paintings. A reproduction of one is shown below. Notice how the picture doesn't look like a real kangaroo, yet you can tell what it's supposed to be. How many different kinds of textures can you find in the painting?

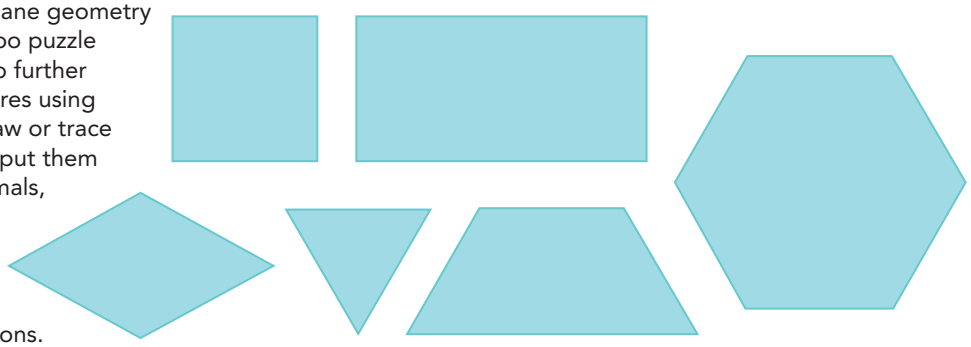
Next Step

Follow these instructions to make an artwork in the style of an indigenous Australian bark painting.

You will need: *a brown paper bag, a spoon or Popsicle™ stick, and crayons.*

1. Tear an 8 x 8-inch square out of a paper bag. Try not to make your square too perfect. Press firmly to color one side of the square with a thick layer of yellow crayon. Then, color over the yellow crayon with a layer of orange crayon.
2. Use a dark brown crayon to color over the orange crayon. Press lightly, but cover the entire space with brown crayon.
3. On scratch paper, design a kangaroo using a variety of lines, like those used in indigenous bark paintings. Then, carefully etch your design in the crayon layers. Use the spoon or Popsicle™ stick to etch lines, textures, and solid areas.

Did you know that you used plane geometry when you completed the kangaroo puzzle at left? You can take this one step further by making your own animal pictures using a variety of regular polygons. Draw or trace the polygons on the right. Then, put them together to form a variety of animals, including a kangaroo. You can photocopy and enlarge the polygons if you want to make larger animals or if you want to make several copies of the polygons.



A MOB Scene

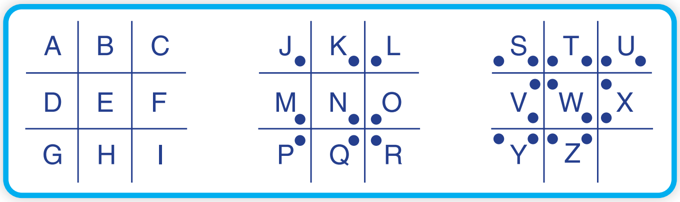
There are 17 kangaroos hiding in the mob scene below. How many of them can you find?

Next Step:

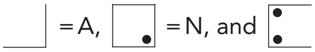
Mob is the word for a group of kangaroos. What other interesting animal group names can you discover? Ask your family and friends. Also, (with your parents' permission) check online.

Answer Kangaroo Secret Code: Not all red kangaroos are red. Although the males are brick red, the females are usually blue-gray. They are called *blue fliers*.
Answers Kangaroo Name Game: nail tail wallaby • wallaroo • white-striped dorcopsis

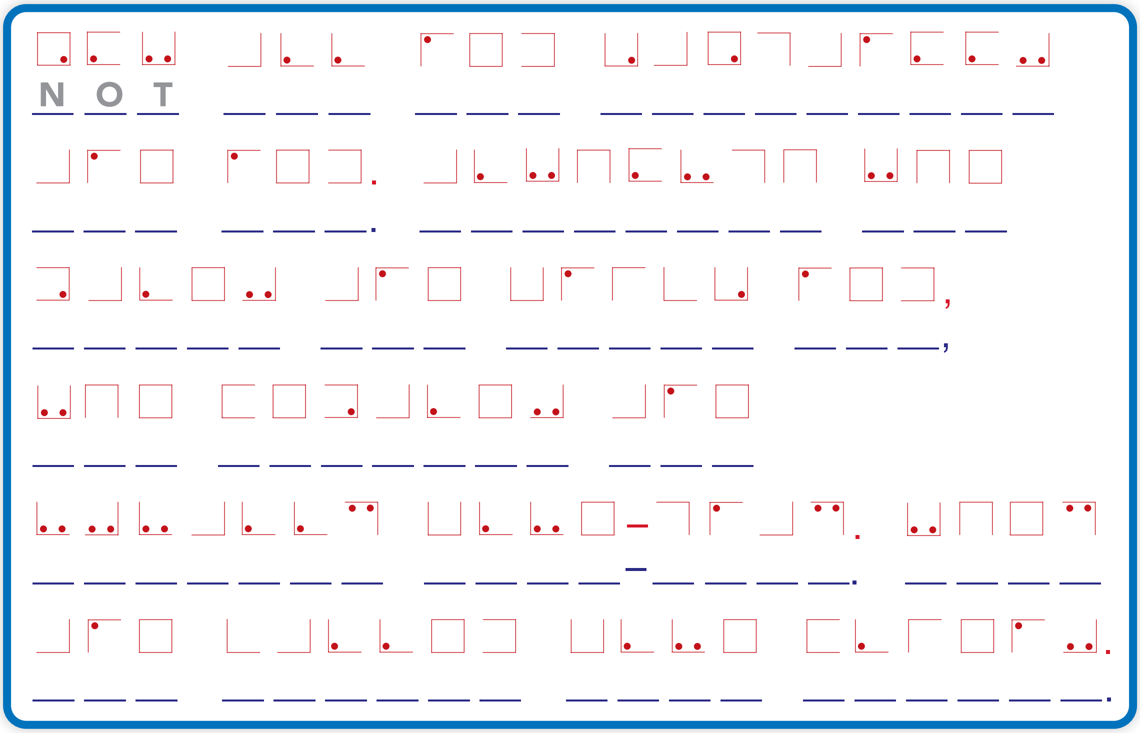
Kangaroo SECRET CODE



The letters in the grids below form a secret code. Each letter in the alphabet is represented by a special symbol.

For example: 

Use the code in the box above right to discover the secret message below. Write the letter that goes with each symbol. We've done the first word for you. When you have finished decoding, read the secret message.



Answer on page c.

Next Step

Did you know that by doing this puzzle you have become a cryptologist? What is a cryptologist? Someone who studies ***cryptology***, which is the science of secure, often secret, communications.

Who are some famous cryptologists? Sherlock Holmes is one. In the story "The Adventure of the Dancing Men," written by Sir Arthur Conan Doyle, the famous detective Holmes solves a murder by figuring out that rows of stick figures are actually a coded message. Each dancing stick figure represents a different letter in the alphabet.

Your parents are also cryptologists. Every time they use their ATM cards and certain credit cards, they are applying cryptology. How? First, when they put in their PIN codes. Then, the card takes over and communicates encoded information to the bank.

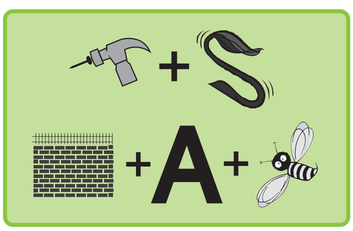
In fact, you might even be an experienced cryptologist yourself. Personal computers all use a special code called ASCII (say askee, for short), which stands for American Standard Code for Information Interchange. ASCII uses a string of seven 1's and 0's to represent 128 different characters and operations.

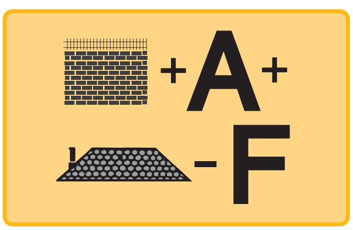
Here are a few examples: **1000001** represents **A**. **0110001** represents **1**. **0001000** represents a **back space**.

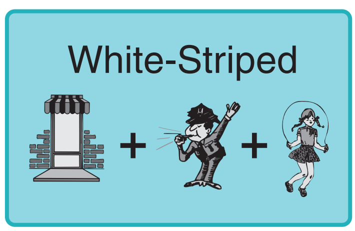
Read more about this interesting field of study in *The Kid's Code and Cipher Book* by Nancy Garden (Hamden, CT: Shoe String, 1991). You might also try creating a code of your own. Share it with a friend and send secret messages to each other.

Kangaroo Name Game

Jump to pages 2 and 3 to help decipher this list of kangaroo names. (Answers on page c.)







Credits: Created and Designed by Carol Prime; Additional Design and Production by Shawn Biner