



## ASTOUNDING HUMMINGBIRDS

by Lanny and Marilyn Johnson

Adapted from <https://www.discovercreation.org/documents/kids/JanandFeb2001KTB.pdf>

They rush towards the ground in a blurring nose-dive, screech to a complete stop - inches from crashing, and dash off at top speed. To escape an enemy, they can fly backward, flip over into a somersault, fly upside down, roll upright and charge away - all in two-tenths of a second. That is faster than you can say your name! Is this some incredible helicopter designed by the government? No! This is a bird. A bird that is unique and different from all other birds. This is a hummingbird!

As you can see, hummingbirds are the stunt pilots of the bird kingdom. With their tiny, weak, perching feet, flying is the only way to get around! They flap their wings at such high speeds that no jumping or running is required to take to the air. Hummingbirds can do all these stunts because of their special design. Their wings are attached to a special swiveling shoulder joint. This allows their wings to move forward and backward as well as tilt and rotate 180 degrees. To hover, the hummingbird flaps its wings 50 times a second in a figure - 8 motion, turning the wings completely over on the front and back sweeps. Then, in a blur of light and a

whir of sound, it can dash, dart, and dive-bomb away.

To supply the energy for their busy, bustling activities, hummingbirds need to eat many calories (food). In fact, they may eat five times their body weight in one day. To equal a hummingbird's calorie intake, a child weighing 70 pounds would have to eat about 62,000 calories per day, 388 bowls of Frosted Flakes cereal (with non-fat milk)! Or 177 candy bars containing 350 calories each! Hummingbirds get most of their calories from flower nectar. In fact, a hummingbird might visit 1,000 flowers per day to get the necessary calories. After feeding for 10 to 15 minutes, they will rest awhile as the food digests. It's important to remember that hummers do not live on nectar alone but also need protein. To get this protein, they eat insects! Often, they eat insects trapped in nectar or tree sap, but they can also pluck flying insects from mid-air! Not many bugs can out-fly a hummingbird.

Sometimes, hummingbirds will become dormant during cool nights or cold weather to save energy. For brief periods they can also slow their metabolism (how fast calories are burned). During these periods, their body temperature will drop from 104 to 75 degrees Fahrenheit, and their pulse rate can drop from 1,200 beats per minute to 36. This helps the hummingbird conserve some of the energy it must work so hard to get.

The long tongue and bill are well designed in hummingbirds. The tongue's end is curled into two tiny tubes which soak up the nectar like a sponge. Rather than sucking the nectar through their bill like a straw, they lap it up with their tongue. Their tongue also has barbs on the tip to snag the insects in the



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Interestingly, if you took the hummingbird's feathers and ground them into powder, you would find no color. This is because the color of the feather doesn't come from a pigment but from layers of air-filled plates. These plates reflect light like tiny prisms, making a beautiful, bedazzling blaze of color.

So why do hummers hum? Because they don't know the words! Hummingbirds can whistle and chirp, but the hum comes from their feathers. Special tapered feathers at the tip of the wings make slots that the wind whistles through when they fly. A male may whir his wings 100 to 200 times a second when courting females! He really hums!

No person could have planned a creature like a hummingbird. We can design helicopters and other flying machines, but even as incredible as some of them are, they are still



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just poor copies of the bird they try to imitate. No one would argue that helicopters were not designed by intelligence, yet evolution would teach that hummingbirds happened by chance and accident! No way! The hummingbird demands a Creator! And that Creator is the Lord God! ***“And out of the ground the LORD God formed every beast of the field, and every fowl of the air;”*** Genesis 2:19a.



Grandma's flower garden takes a lot of work, but it is worth it when she sees all the creatures it attracts looking for a meal.

**1st CHALLENGE**

In the picture on the right find:

10 hummingbirds,

4 butterflies,

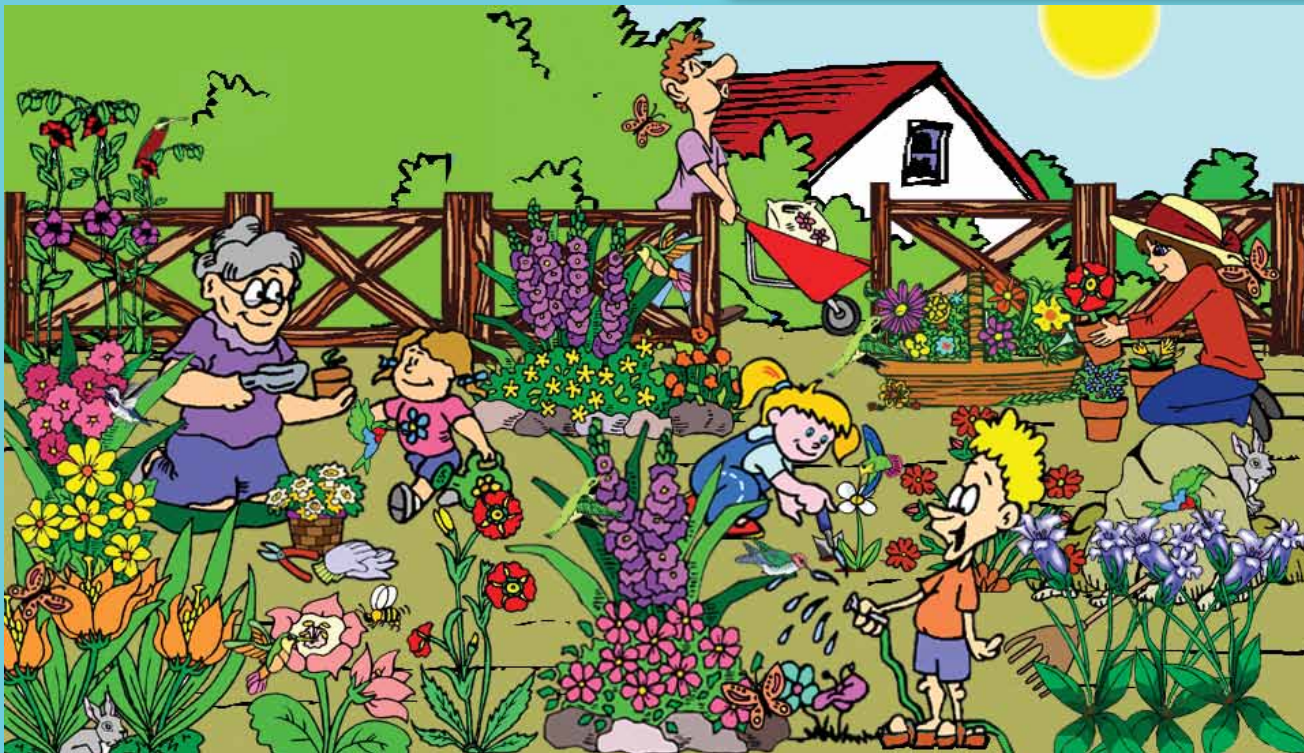
2 rabbits,

1 honeybee.



**2nd CHALLENGE**

Find the 15 differences between the two pictures.



[www.discovercreation.org/kids/newsletteranswers.htm](http://www.discovercreation.org/kids/newsletteranswers.htm)

FOR ANSWERS GO TO:

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