Do Pacific right whales sing? No one has been sure. Until now.

Scientists recorded sounds in the ocean near Alaska. They found the whale that made the sounds. It was a right whale.

What was his song? It was like gunshots!

Psalm 148 commands God’s creation to praise Him, even whales. “Praise the Lord from the Earth, you great sea creatures and all deeps!”

God’s world is so big and wonderful that we are always learning new things about it. Scientists know that humpback, bowhead, and other whales make songs. These are sounds that are repeated in a pattern. Scientists in Alaska were excited to know that the sounds they recorded were right whale songs. These whales also make moans and warbles.

Pull Apart! This publication is arranged as eight “nested” weekly lesson sheets.

A right whale breathes air through its blowhole.

I’m as large as a school bus.
A man in England hunts for metal. He looked in a field. Buzz-buzz! He found a very old gold coin! He sold the coin. Someone paid seven hundred thousand dollars for it! That was a record.

The man asked a farmer if he could hunt for metal in his field. “Beep-beep” went his detector. He found old tractor parts. “Buzz, buzz,” went his detector. That means gold! It was a 1,700-year-old coin. It shows the face of a Roman emperor named Allectus. There are only 24 of these coins in the world. The finder sold the coin. He will share his money with the farmer. Jesus tells us in Matthew 6:20-21 that our hearts are with our treasures. So we should “lay up treasures in heaven.”
Rome has a problem.

Rome is a beautiful old city in Italy. Visitors come. But they hold their noses! Stinky trash is everywhere. Dogs, rats, and birds dig in it. They spread germs. There is no place to dump the trash. Leaders in Rome must make a plan. That could take time.

The main garbage dump for Rome closed six years ago. It had no more room. It was not safe. The company that collects Rome’s garbage is in debt. It cannot keep up. Many people in the city do not want to recycle. City leaders cannot make a good plan. Doctors warn that people could become sick. How will the city solve its trash problem? Who will help?

The book of Leviticus contains many laws for Israel. Chapter 11:32-40 teaches God’s people how to keep food and water supplies pure. He cares about all parts of His creation.
Did your family go camping this summer? Did you take pictures? These look like the same picture. But can you find a dozen differences?
A sand sculpture festival was held in Germany. One castle was 58 feet tall. It set a Guinness World Record. Artists needed more than buckets and shovels. They used a digger and a crane. The sand weighed more than three elephants! People can visit the castle until November. But you know it won’t last. Matthew 7:24 says that Jesus’ words are like a house built on rock. It won’t wash away like sand does.

Do you like to make sand castles?

Artists tried to make the tallest one. They worked together.

It took a month.

Their castle was bigger than a three-story house!
Burmese pythons get big and hungry. There are too many in Florida. They eat other animals. Scientists have a plan to catch pythons. First they catch one snake and put a tracker inside it. This makes the snake a spy! The snake is released. It goes back to where other snakes like to hide. The tracker gives away the whole bunch. Genesis 1:28 tells us that God put people in charge of animals—even snakes!
See the fair!

Victoria and Ashtyn ride the Swinger in Kentucky.

Each state holds a fair. So do many counties. You can see corn and carrots and cows from your own state. There are rides and swings too. You can try a fried pickle.

Fairs celebrate things that make each state special. There are contests for the best vegetable or the biggest animal! Kids your age can bring their rabbits, sheep, or other critters. Each winner gets a blue ribbon. Many fairs have rides that spin or jump. The Ferris wheel turns slowly so people can see from up high. Ecclesiastes 3:13 says “everyone should eat and drink and take pleasure in all his toil—this is God’s gift to man.”

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Fairgrounds in Illinois

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Fish—Live under water, breathe through gills, have scales and fins, are cold-blooded, and lay many eggs.

Birds—Have feathers and wings, lay eggs, have two legs, have ear holes, and are warm-blooded.

Amphibians—Live on land and in water, have webbed feet, have lungs and gills, are cold-blooded, have smooth skin, and lay many eggs.

Reptiles—Have scaly skin, most lay eggs, have ear holes, and are cold-blooded.

Mammals—Have fur, give birth and nurse live young, and breathe air.
Can they bake in space?

Astronauts on the Space Station want fresh baked food. The Zero G Kitchen Space Oven is ready! A rocket will carry it into space this year. Astronauts could be baking cookies soon!

Ian and Jordana Fichtenbaum designed the space oven. They are both chefs.

Zero G oven and baking pouch

An astronaut on a spacewalk

READ MORE

Zero G Kitchen is in New York City. Its owners are chefs. They invented a space oven. It will be among supplies sent by rocket to the International Space Station. An oven on the Space Station cannot be too hot. It cannot leave crumbs that would clog expensive machines or be sniffed up by astronauts. The first cookies baked in space will be chocolate chip, of course! How many things that God created does it take to make a cookie? 1 Chronicles 16:34 reminds us, “Oh give thanks to the Lord, for He is good!”

AP Photos

God’s Big WORLD • September/October 2019
Marium is a dugong. She lives in ocean waters near Thailand. People love this marine mammal. She loves them too! She follows their boats because people feed her. Marium’s mother is missing. So this baby needs help until she is older. But a dugong is a wild animal! She is not a pet. She must be taught how to live in the wild. Deuteronomy 22:6 tells us to be very careful with wildlife.

They helped the lost baby.


Marium even tries to hug canoes.
Three pilots showed off jet suits. They soared through the air. They flew over water. They raced around objects. Richard Browning built the world’s first jet suit. Mr. Browning wants to organize jet suit races. He plans to build jet suits that are even more powerful. Jeremiah 10:12 tells us God built the Earth by His power. Now that’s real power!
You will never find an alien or spacecraft like these. We made them up. But you will find all the letters of the alphabet. They’re real. Mark each gray letter when you find that letter in the spaceship and rover.
Thomas Dambo built the troll for a festival last year in Breckenridge, Colorado. Townspeople didn’t know that thousands of visitors would come to see “Isak Heartstone.” Homeowners complained. Mr. Dambo took Isak down. He rebuilt the troll in the woods behind an ice arena. Isak even has a heart-shaped stone inside. Make-believe trolls are not-so-nice creatures with stony hearts. There is good news for us! Ezekiel 36:26 tells us that God removes our hearts of stone and gives us hearts of flesh, to love Him.

A troll never truly goes away.

Isak is a big wooden troll.

Visitors came to see him.
But they tromped through yards.
They left trash.

People said, “Take Isak down!”

Good news! Isak now is in a better spot. It is okay for visitors too.
Dogs were wild long ago. But people began to keep them as pets. And they liked pups that made cute, sad faces. Dogs look at people. They tell us what they want with their eyes. They have muscles that make their eyebrows lift. A team of scientists has learned that wolves do not have those muscles. How does your dog get you to do what he wants? Do his eyes beg? Do they look sad? How does he do that? Most dogs have strong muscles above their eyes. These lift their eyebrows. Muscles help your dog and you to make faces!

What do you do with your eyes? Do you “Behold wondrous things out of [God’s] law,” as Psalm 119:18 says?
It is a farm that floats!

Peter van W. wants people to have the freshest milk. His farm is near a large city in Holland. Forty cows live on the pontoon.

The roof catches rain for water. A robot milks the cows. The floors are soft rubber.

The cows are safe. And they do not get seasick.

Peter van Wingerden’s dairy is tied up in the big port of Rotterdam. His cows eat grass, grain, and potato peelings. All the food comes from places near the farm. It is cut, mixed, and loaded into feed boxes by wide, moving belts. Mr. van W. believes people should have fresh food right where they live. He has plans to build more floating farms in China and New York City. Deuteronomy 11:15 reminds us that God provides food for cattle.
Ready to blast off? Find fifteen hidden pictures. Mark the words when you find them.

scoop
mailbox
lamp
fish
pick
top hat
shoe
iron
desk
hammer
axe
sailboat
book
gun
fishing pole
Smoke and ash filled the sky.

People watched the big volcano. They hiked close to it.

Oh no! It exploded. It threw fire. It spit rock. It spewed smoke.

People dodged flames. They ran away fast.

Stromboli is a volcano on the island of Stromboli in Italy. It is huge! It sometimes lights up the night sky with fire. People like to see the volcano. They hike around it. But the volcano erupted! It shot out rocks. Hot lava burned the land. Hikers were in danger. Some ran. Others jumped into the sea. Firefighters put out the flames. It is God who keeps us safe. Psalm 4:8 says, “In peace I will both lie down and sleep; for you alone, O Lord, make me dwell in safety.”
Five black rhinos once lived in zoos.
Each one got into a big crate. They flew in a plane.
Now they live in Africa. They learn to hunt and care for themselves.
They are no longer zoo animals.

All the Eastern black rhinos in Rwanda were killed in a war. These five rhinos lived in zoos in Denmark, England, and Czech Republic. They had to be trained to enter big crates. They were loaded onto a cargo plane and flown to Rwanda. Zookeepers and a vet flew with them. The rhinos will be safe in Akagera National Park. But they will be wild. Genesis 1:25 tells us, “And God made the beasts of the Earth according to their kinds.”
A new eye display at the Children’s Museum of Illinois is called “Peek Inside.” It makes learning about eyes fun! Climb inside the giant eye. What does it look like from there? Dr. John Lee is an eye doctor. He made the big eye. He wants people to learn how their eyes work. Eyes are God’s handiwork. Take care of them. Matthew 6:22 calls the eye “the lamp of the body.”
Can you find ten differences?
The Calgary Stampede is held in Alberta, Canada. It celebrated over 100 years of rodeo fun this year. Cowboys and cowgirls came from all over North America to ride and rope and win prizes. Millions of people came to cheer, eat, swoop on carnival rides, and hear bands play. People call it “The Greatest Outdoor Show on Earth.” Psalm 149:4 says, “The Lord takes pleasure in His people.” Isn’t that amazing?
Mayer Shacter travels to search for folk art in Mexico. Folk art has been made in Mexico for hundreds of years. This kind of art is handmade and is often bright and colorful. Artists teach Mr. Shacter about their baskets, pottery, jewelry, and fabric. Mr. Shacter’s gallery is filled with art to see and buy. In Exodus 35 we read about artists. “And every skillful woman spun with her hands.” They used colorful yarns. Their art was a gift to God!
They zip across the court. They bend and scoop up balls. They roll them to the right place. They rush towels to hot players.

These are ball boys and ball girls. They work at Grand Slam tennis matches.

The U.S. Open was played last month. It had three hundred ball boys and girls!
These storms picked up letters and tossed them into the clouds. Circle the letter in each cloud that belongs in each orange storm word.
Long fur keeps Arctic foxes warm in the winter. Their fur changes with the seasons. It is white in winter. It sheds (falls out) in the spring. Brown fur grows in. Brown matches the ground to help the creatures hide. **God watches over even roaming little foxes. Imagine how much more he cares for you.** Proverbs 2:8 says that God watches over the way of his people.
Big Boy is one large train engine!
It was in a museum. Workers fixed it up. Big Boy no longer runs on coal. So it does not huff lots of black smoke. But it makes lots of noise!
It chugged from Wyoming to Illinois.

Twenty-five Big Boy engines were made for the Union Pacific Railroad 78 years ago. They were as long as two basketball courts. They were made to bend in the middle to go around curves. Each weighed over one million pounds. The railroad company is proud of its big locomotive. It wanted to show off Big Boy No. 4014. God is more powerful than this locomotive. Job 26:14 asks, “But the thunder of His power who can understand?”

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People worked in teams. They built 12 playhouses one morning. They painted the houses. They added solar lights. Sunlight would make them glow. Then the builders surprised little kids. The playhouses were gifts for kids whose mom or dad is a soldier. “This is amazing,” said one dad. The houses are fun for kids. They also helped grownups learn how to build. James 1:17 says that every good gift is from above. God gives us good things to enjoy.

People built a little house. It was for a little girl. The outside was painted fun colors. She ran inside. The house had lights! She loved the tiny house. It was a good gift.

This house was a gift.

Adrienne Casaubon steps into her new playhouse.
Follow the column letter down to where it matches the row number.
Give the missing number or letter for each place pictured.
Is there an Alan, Bruce, or Duncan in your family? These are names of families—or clans—in Scotland. Many from these clans now live in the United States. They like to celebrate Scotland at the Highland Games on Grandfather Mountain in North Carolina or other places. Some wear the family tartan (plaid cloth). All enjoy the music, dancing, and pole toss or hammer throw. Isaiah 46:9 tells us to “remember the former things of old; for I am God, and there is none like me.”
There are too many mountain goats in Washington State’s Olympic National Park. They belong in the Cascade Mountains. How do you move goats? People first catch them. Each goat gets a good check-up and a collar. This will help scientists keep track of them. Then the goats take a helicopter ride. They hang below it. The helicopter sets the goats down at their new home. Psalm 104:18 says, “The high mountains are for the wild goats.”

Can goats fly?

Look! Those goats are flying. They sit safely in a sling. They dangle in the air.

Where are they going? The helicopter flies them to a new mountain home.

Top: Derrick Halsey catches a kid goat.

Left: Patti Happe adjusts the sling for a nanny mountain goat. A billy rides the top sling.

A helicopter lifts the goats.
The World Championships of pogo bounced into Pittsburgh, Pennsylvania. Extreme pogo athletes showed their tricks. They call it a “pogopalooza.” Visitors could try pogo sticking too. George Hansburg invented the first all-metal pogo stick with an enclosed spring 100 years ago. Now athletes use sticks with air springs. Psalm 9:2 reminds us to “sing praise to your name, O Most High.” God gives us the ability to make things and to play.
You can join a club or a class to learn to bake. You can learn at home, too. What do you do first? Put a number 1 in the circle. What comes next? Number the pictures in the right order. Circle the correct word for each picture.

1. mix
2. eat
3. buy
4. fill
5. mix
6. buy
7. bake
8. frost
9. mix
10. bake
11. add
12. frost

Number the pictures in the right order. Circle the correct word for each picture.