### Science Day 1 - Light - Sabbath

#### MATERIALS: Prism, full spectrum torch or sunlight & mirrors to shine sun into room, Bible

I'm going to tell you something amazing.

How do we know when it's day time and when it's night? (Darkness and light)

Where does the light come from? (The sun)

But on day 1 of creation, God hadn't made the sun yet so where did the light come from?

We can have light sometimes when we don't have the sun; where can we get light from? (Torch, light bulb, fire, (matches, cigarette lighter, glow-in-the-dark things, mobile phone – show some examples.)

If God made the light on the first Sunday, before He even made the sun – Did God have a fire? Did God have a torch?

There is another place that has light that doesn't have a sun, or a torch or a fire or light bulb. That special place is heaven.

Verse about rainbow around God's throne & prism with rainbow – Rev 4:3 & 10:1

God gave some special visions – like dreams – to John and this is what he wrote when an angel showed him God's city in heaven in Revelation  $21:23_{\text{NIV}}$ , "The city does not need the sun or the moon to shine on it, for the glory of God gives it light."

Where does the light come from? (God)

# Science Day 2 - Air - Monday

# MATERIALS: Glass, tea candle, tissue, clear tub of water, lighter, towel, cold water bottle?

I'm going to tell you something amazing.

God gave us air to breathe – I have a cup full of air – can you see it?

Now I'm going to put a tissue inside – is there anything inside?

Tell the kids I'm going to put the cup & tissue in the water – get them to guess what will happen to the tissue.

Ask a volunteer to put the cup in the water

Test the tissue to see if it is wet

Why didn't the tissue get wet?

When you breathe in, your lungs take oxygen from the air and put into your blood to send it all around your body, because all of your body needs oxygen.

Fire also needs oxygen to burn. Do you know what happens when a fire doesn't have any oxygen?

### Have a candle in a glass and cover it so it goes out.

Aside from breathing, what do you use your nose for? (Smelling)

When you smell, your nose is finding different things in the air which make it smell different.

The air is made up of a lot more things than oxygen and smells; in this tank I have a special type of air – you can't smell it, but when you have lots of it all together something special happens.

Fill a balloon with helium.

One last thing I will tell you about this morning. I have a (cold) drink bottle sitting here, the lid is on very tight so none of my water can escape – but can you see what has gone on the outside? (Water) Where did it come from? (The air)

# No Science for Day 3 - Tuesday

# Science Day 4 – Solar System – Wednesday

Materials: marble, handball, measuring tape (6m)

Have any of you looked up at the moon and the stars this week?

Have you wondered what they are and how big they really are? The moon seems really big doesn't it?

What makes the moon shine?

The sun is like a huge ball of fire and it is so hot that if our earth was any closer to it, we wouldn't be able to live, it would be too hot!

How big the Earth is compared to the moon – marble and hand ball

How big the sun is compared to earth – hand ball to 6 m.

The stars are really more suns some are way bigger than our sun—how amazing!

Did you know we are moving right now? Our earth is constantly moving around the sun and the moon is constantly moving around us.

Pick kids to help be Earth, Moon & Sun

Earth Diameter: 12756 km

Moon Diameter: 3476 km

Sun Diameter: 1,392,000 km

### Science Day 5 - Birds and Fish - Thursday

#### MATERIALS: brush turkey photo, brush turkey nest photo, angler fish photo

Have you ever seen one of these? (show photo of a brush turkey)

Did you know that they are amazing and special from all other birds?

When a mummy and daddy bird want to have babies - they lay eggs, then the mummy or daddy has to sit on those eggs to keep them warm, and when those eggs hatch they have to feed the babies until they are big enough to fly and find their own food.

Brush turkeys are different – does anyone know what a brush turkey nest looks like? (show photo) they can be HUGE.

Why do they build such big nests? Because they don't sit on their eggs, they make a compost heap to hatch their eggs for them! The nest has to be just the right temperature or the babies won't hatch.

Who taught them to do that?

When the chicks hatch, they dig their way out of the nest all on their own, they just know the right way out of that huge pile and their mummy or daddy never feeds them, they can do everything themselves when they hatch.

So if their mummy and daddy didn't teach them all that, who do you think taught them?

I'm going to tell you about another amazing creation the

### Deep sea angler fish (photo)

Have you ever seen someone fishing with a rod? Did you know that some fish have fishing rods?

The deep sea angler fish has what looks like a fishing rod coming out of its head with what looks like bait. Another fish comes along to check it out and swims right up to the angler fish's mouth.

What is really cool about the angler fish is that it lives REALLY REALLY deep in the ocean where it is completely dark, so how do the other fish see the rod and bait that the angler fish has? The bait on the angler fish glows!

Do you glow?

Scientists have studied the angler fish and they don't know how the fish makes the light without heat. Only God knows how to do that!

### Science Day 6 - Animals & People - Friday

I have something amazing to tell you. Today we are talking about some of the animals God made.

Giraffe

Have you ever wondered why the giraffe has such a LONG neck?

God made them that way – their food is way up in the trees, how else would they get it.

But did you know the giraffe is extra special?

We all have hearts to pump blood around our body. Do you think that it would take a big pump to get blood up to the giraffe's head?

Yes, their heart is almost a meter long – Wow!

But what happens when the giraffe needs to get a drink? He doesn't have a straw like an elephant! He has to bend down. Now if something very special didn't happen when the giraffe bent over, his heart pumping blood up to his head is so powerful, his head would burst!

But does the giraffe's head burst when he bends down for a drink? Of course not!

When the giraffe starts to bend over, it is like a little tap gets turned way down by little valves closing and he doesn't even get a headache! And when he starts to stand up again, everything goes back to normal.

The giraffe doesn't even know that all of this happened just so he could take a drink of water – but God made the giraffe that way! No other animal is like that!

#### **Tortoise**

Have you ever wondered what would happen to a tortoise if it got flipped over? Well, a tortoise (which is like a turtle) will roll until it is right side up and then stay there. It shell has a special shape so that if it accidentally gets turned the wrong way up he just rolls back to the right way up!

That is pretty special, because he has no way of turning himself over if he gets turned the wrong way.

God made him that way and that is pretty amazing!

Thousands of different types of animals...

Yes they are all perfect.