Animals



socher:

1. My friend Eggy

Make an egg your friend for the day!

The night before, ask an adult to help you hard boil an egg. When the egg is cool enough to handle, decorate it. Make sure you include a face. Next day take your egg everywhere with you. Record your adventures together.

How does having an egg with you affect the other things you want to do?

How might a female wallaby or possum be affected by taking its young joey even who is a system.

Design a fish

the first of the control of the cont

the state of the second and the state of the

Activities the transportation of the property of the property

(1) A. P.D. WHIZ (TO S. If your classmates also did lists of farm animals, compare your list to theirs. What animals have they are listed that you could have used? Add them to your list.

5. Caterpillar care

Carefully capture and care for a caterpillar.

You will need a glass jar with a screw top lid. Ask and adult to puncture small holes in the lid. Look for a caterpillar on a plant. Ask an adult to cut off a small piece of the plant the caterpillar is feeding on. Place the caterpillar on it and put them both in the jar. Screw the lid on loosely so the caterpillar cannot escape but some air can get in. Replace the plant every day or two so the caterpillar has plenty of food. (If it is very dry weather add a little water to the plant cutting each day.)

Keep a diary about your caterpillar until it becomes a moth or butterfly. Use your diary to record anything you notice about your caterpillar.

Did you know? Scientists keep note books about their observations



Ocean creatures

Write a list of eight creatures that live in the ocean. Choose one creature, photocopy a picture of it, write its name on the photocopy and then find out five interesting facts about it. (An adult might help you do the photocopying.)

Use these facts to make up three to five clues about your creature and run a quiz to see if your classmates can guess what it is.

Show them the picture at the end of the quiz and ask if your clues helped them make their ques Report to your teacher on what you did and what you found out. (Assistance of the action of the control of the report is to be a written or spoken one.)

Did you know? Scientists help achieves from the sections of the property of



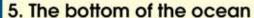
the fire war to all gallor in indicable it cooking how edd 10a distined up?

the many act traditions with warranteen additionaps of and the Addition of the book worth to pake to the

o clear up to "bit spill using materials such as cotton have some hylon material, string and paper towel. Which material soaked up the most oil and how quickly did it work? Write down what you did and what you found out.

EXTRA FOR WHIZ KIDS: Dip a bird's feather into your 'oily ocean'. What happens to the feather? How would oily feathers affect a sea bird?





What is at the bottom of the ocean? Find out and make a drawing or poster or PowerPoint presentation to show your teacher and classmates.





Clean and Green



1. What can we recycle?

Recycling is the best way we can decrease the amount of waste going into rubbish dumps. Most of the packaging we buy our food in can be recycled. Do you know what types of material can be recycled? Firstly, do a survey of your classmates and family by asking them 1) if they think recycling is important and why and 2) what packaging they put into the recycling bin each week. Write down their answers.

of each type of material e.g. plastic, glass etc. and pasting them onto a large the sample draw a picture of the types of items made from that a with a sample draw a picture of the types of items made from that a with a sample draw a picture of the types of items made from that a with a sample draw a picture of the types of items made from that a with a sample of the types of the types of the property of the types of type sample draw a picture of the types of items made from that not the same in the chart to your class.

EXTRA FOR WHIZ KITT TRANSPORTED TO A SECURITY OF THE SECURITY

state of the state

The control of the co Life 10 19 or your pollution words and how pollution makes you feel.

Untidy town

Write a story about a school or town that never cleans up any of its rubbish. You might like to draw some pictures to accompany your story. Read your story to your classmates.





Finding out about Ourselves



Food THORE

1. Food

Make a food chart.

Collect some of the advertising material that supermarkets put into your letter-box. Look through them to find pictures of foods, snacks and drinks. Cut out some of these pictures.

With a thick-tipped marker draw a line down the middle of a large piece of paper or cardboard. Write One 2 sector day foods as a heading on the top left side of the paper and Once in a while foods as a heading on the top left side of the paper.

Paste your pictures under the headings where they belong

Did you know? Scientists and a called the chart the chart in the chart in

equipment of the state of the s

county your marker about plast that there is an uplastic funnel into a piece of soft plastic tubing.

** Granly put the acculate tuping up next to your ear and put the wide end of the funnel on your chest to listen to your heat housing.

Now try doing different activities for one minute and then listen to your heart beat to find out whether it changes. You could try things like reading, skipping, hopping and jumping.

Give your heart a five minute rest between each activity.

Write a sentence or two about which activities made your heart beat faster. Tell your teacher what you discovered.

Caution: do not leave your stethoscope in your ear while you are doing an activity,

My classmates

Use a table, like the one in Activity 3, to list all the ways that your classmates are the same and all the ways they are different.

Write My classmates as a heading at the top of your table, Underneath this on the next row write the headings How they are the same and then How they are different. Fill in your table. (You may get an adult to help you spell a word.)

EXTRA FOR WHIZ KIDS: If your classmates also completed this activity, compare your list to theirs Add to your list any things they have that you could also have listed. Include each thing only once.

Fun with Chemistry



flats ad dote

Goldilocks and the Three Bears

When Goldilocks broke into the Three Bears' house she found one bowl of porridge too hot, one too cold and one just right.

Ask an adult to cook some oats porridge for you.

Add enough milk and sugar so you like the taste. Then divide the porridge into three bowls. Cool one bowl in the firing pleave two bowls out. After two hours ask an adult to warm one of these in the microwave. Then to see the bowls of porridge. Which bowl of porridge did you like most? Why?

Which did you like the least? Why? Tell your teacher what you form to see the porridge.

Did you know? The flavours in different Size is a record of the second secretary in the second secretary in the second se

this used to the family age mings.

The AND COUNTY SAND COUNTY OF WAR IN WATER What do you think will happen if it's added to said write? The care find out.

E: back some dried spaghetti into small pieces. Pour some soda water into a glass and then add the pieces of spaghetti. What happens?

Draw a poster to show what happened. Display your poster in your classroom.

5. Making fake cat's vomit

Did you know that blood, vomit, poo and other gruesome things you see in movies are fake? Would you like to try to make something fake? What about cat's vomit?

You will need a spoon, a teaspoon of psyllium husks from a health food shop, a glass of water, a small plate, a microwave and a microwave proof bowl.

Mix the psyllium husks and water in the bowl. Ask an adult to heat it in the microwave until it is about to bubble out of the bowl. Turn the microwave off and allow a little time to cool. Repeat this five or six times. Then pour the goo onto the plate and use a spoon to spread it out a little. Let it cool.

How real does your cat's vomit look? is there anything you could do to make it look more real?

Put it somewhere in your house and see if you can trick someone with it. Did it work?

Show your cat's vomit to your teacher and classmates.

(You can store your 'cat's vomit' for a long time in a clip seal plastic bag in the fridge.)

Did you know? Scientists use heat to make new materials.



Indigenous Science



didis

1. Weather signs from the moon

Traditional Indigenous Australians often held their special ceremonies at the time of the full Moon. The full Moon not only gives more light but they knew that there was a higher chance of calm weather. Meteorologists (people who observe weather patterns) have confirmed this. Each night for two months, keep a record of the shape of the Moon and the weather (e.g. is it fine, rainy, windy etc.). Ask your teacher to show you how you could keep your records in a table.

After the two months look at your records. Was the weather calm and fine on the nights of the fill No the Transparent any other weather patterns based on the shape of the Moon? Show your teach the fill the fill

EXTRA FOR WHIZ KIDS: Extend your Moon and weather recover to

2. Bush tucker

יינו או או או או או או איינו איי איינו איי

FX78.4 TOP WILL Can you find out the names of the stars in the Southern Cross and the Pointers?

4. Shelter

Indigenous Australians did not build permanent homes, they moved with the seasons and the availability of food, and so built temporary shelters instead. The design of these shelters varied depending on the environment and the weather.

Find pictures in library books or the Internet (ask an adult for some help) of different traditional Aboriginal shelters. Construct small models of two of these shelters. Label your models with the correct Aboriginal name. Ask your teacher to think of some questions to ask you about your Aboriginal shelters and how you made them.

5. Tools and weapons

Traditional Aboriginal technology involved a good understanding of science and how things worked. Simple, but effective, tools and weapons were made from local materials and used for hunting and collecting food. Find out what the following tools and weapons were used for and why they were important 1) boomerang, 2) nulla nulla, 3) cooluman, 4) woomera.

Create a colourful poster with pictures and explanations of these Aboriginal tools for display in your classroom. You might like to add a few more weapons and tools you learnt about during your research.



Inventing and Designing



Invent a gadget

Invent a gadget that could help an elderly person or someone with a disability.

Make a drawing of your design. On your drawing describe how your design would work and how it could assist someone.

EXTRA FOR WHIZ KIDS: Show your drawing to an adult or to a classmate and let them ask questions about volume 1 and Answer their questions.

2. Invent a toy

Design and make a useful chief of the Art of

) the gostine direction of how things move: 11) has more than one part.

(You may ask help from an adult to answer some questions and with spelling.)

Use a table like this one to show the names of the tool inventions and what they can do.

Did you know? Scientists use tables to record what they have found out.

What it can do
Turns as it works





Looking into Liquids



eacher's nitials

1. Little Miss Muffet

Do you remember what Little Miss Muffet ate when she sat on her tuffet? Do you know what it looks and tastes like? Let's find out.

You will need a cup of milk, 1-3 teaspoons of lemon juice or white vinegar, a sieve and maybe a pinch of salt, (Do not use UHT long life or full cream milk.)

Ask an adult to heat the milk in a microwave until it is hot but not boiling. Try heating it for about 12 to be the common of the milk in a microwave until it is hot but not boiling. Try heating it for about 12 to be a second of the milk in a microwave until it is hot but not boiling.

Now add the vinegar or lemon juice and stir. What happens? Allow it to cool for the same a sieve to separate the white solid (curds) from the liquid (where to support the solid (curds) from the liquid (where to support the solid solid

Tell your teacher what happen 191 and with a sense first to the

Display is the literate of the

SXFA SWEAT TOOLS AND A SECOND STREET

- STATE OF STATE OF

প্রতির স্থানে প্রতির স্থান প্রতির করে লোকে ১৯৮৮ টে a glass of water? What do you think will happen when you add an লোকে এটেছ সংগ্রেক্ত স্থানিক তালি? Try it and find out.

values a stall glass full of vegetable oil and an ice cube. Gently add the ice cube to the vegetable oil and watch what happens until the ice is all melted. Make some drawings to show what you did and what happened. Put some labels on your drawings to show what happened.

5. What if?

What would your world be like if water floated in the air?

Here are some hints to get you thinking: Would you still be able to do all of the kinds of things you do everyday? Would some animals be affected? Would your new world seem crazy?

Draw a picture to show what you think your life or world would be like.

Show your picture to your teacher and classmates and tell them about this very different world.





Moving through



Hot air balloon

Have you ever seen a large, beautiful hot air balloon carrying people through the air early on still, sunny mornings?

Here is a way to make a small hot air balloon of your own.

You will need a hair dryer, a dry cleaner's plastic bag or a garbage bag, some paper clips, stickers or an incoloured pictures for decoration, glue and string. Decorate your bag with the stickers a product of the string of the string.

open end of the bag some weight by attaching paper clips evenly are traited.

Ask an adult to set the hair dryer to "medium" and to "ye received by the hot air. When you feel the hot of the bag sentences to describe whether the hot of the hot

The soft women to have it sectors acked a page of the about how well it flies?

Hind Care 1 . Thing paper through furning edifferent kinds of paper. You could try photocopying paper, newspaper, notebook poor. Cagazine paper and cardboard.

waxe your plane exactly the same way each time, only changing the kind of paper you use. Test each plane by throwing it in exactly the same way each time. What did you find out? Discuss your findings with your teacher.

Did you know? Scientists use fair tests like this where they change only one thing (you changed only the type of paper) and keep everything else the same (you kept the way you made the planes and the way you threw them)

Helicopters and planes

the second of the latest tell

Make an illustrated poster about helicopters and planes. Photocopy a picture, or draw one of each and paste them onto some cardboard.

Write notes next to your pictures about the jobs the various parts do to help the helicopter and plane to take off, fly and move up and down. Display your poster in your classroom.

Outdoor Science



sacher flais

1. In my garden

Collect five small creatures from your school or home garden and observe them for one day. \(\textstyle \) Do not collect bees or \(\text{wasps} \) (that can sting) or any creature you are allergic to!

You will need a screw top jar for each animal and some shelter for it like a tiny branch or a few dead leaves. Use the jou and its lid to collect the animal. (Be careful not to hurt or touch the creature). Screw the lid on lightly 55 with 2.5 m km² but your creature cannot get out.

What is the most interesting discovery that you made about each or inclination

Give a short talk your class about what you discoursed

Did you know? The storage and the storage and

The state of the s

செய்து இரு நடித்த அளிக்கு அளிக்கு வாகியித்த கூடி build a model of something that will prevent possums or rabbits from getting இது நடித்து கூடித்து குகுக்கு கூடித்து குகுக்கு கூடித்து குகுக்கு குகுக்கு குக்கு குக்குக்கு குக்கு

You, this was materials like construction paper, scissors, glue, sticky tape, crayons, string, a pencil, cardboard, paddle pop sticks, pipe cleaners, straws, plasticine, paper towel tubes, and a paper plate with small pieces of plants stuck to it to represent your vegetable garden.

Show your teacher and classmates your invention.

5. Places for animals

Use a digital camera to take pictures of five places in your backyard, schoolyard, or local park where animals live or come to feed.

Print out your pictures and use them to make a poster about places where animals live. You could display your poster in your classroom.

EXTRA FOR WHIZ KIDS: Find four pictures of places where other animals (e.g. lions, whales, penguins) live and glue them to the back of your poster. Describe the places where these animals live and feed.

Did you know? Scientists take pictures of places where animals live.

Pets and Cardens



eacher' ntias

1. My fragrant plant collection

Preserve your own samples of three fragrant (nice smelling) garden plants.

Cut only a small piece of stem with some leaves from each plant.

\[\text{\t

Did you from the Comment of Section 1985 and 1985

party and the same of the same of the same

The state of the s

、 1.11 (1.11) (1.11

2014 Carried Lifes, golden property grow from outlings.

5. Thirsty animals

What kinds of animals in your garden drink water? Put out old, clean pie dishes or take away containers in places you think animals might visit. Fill them with water. Observe them over a few days to see what kinds of animals visit. Make sure you keep the containers full. (Throw out the water after a few days so mosquitoes do not breed in it.)

Make a poster about the animals that have visited your water containers. Display your poster in the classroom.

EXTRA FOR WHIZ KIDS: Find out the names of a least three animals that live on the land but do not drink water. Show your teacher your list.

Did you know? Some animals do not need to drink water as they get enough from the food they eat.



What I eat

For four weeks, collect all of the advertising material that supermarkets put into your letterbox. Cut out pictures from this material to make a poster of the plants that you eat. On a large sheet of paper, paste the pictures into three groups vegetables, fruits and seeds. Write the name of each group above the pictures for that group.

EXTRA FOR WHIZ KIDS: Write the name of each vegetable, fruit or seed underneath the picture of the Did you know? Scientists arrange things into groups when they have something which have

Seeds

The same of the plant.

The same of the plant of the plant of the plant.

The same of the plant of the plant

ال وفيل (من المالية المالية على على المالية على على المالية المالية على المالية المالية على المالية المالية على book a cover with a title page and a back page.

Show your leaf book to your friends.

Did you know? Plant collections are kept in special places called herbariums. They are like museums for plants.

How we use plants

We use plants for many things besides food.

Find the name of a plant that can be used 1) to make clothing; 2) to make a shelter or a house;

3) to make paper and cardboard; 4) to make perfume; 5) to make a medicine or for healing;

as a herb or spice to flavour food.

(It is OK to ask an adult to help you find the answer to a question.)

Use your answers to make a poster about how we use different plants.

Don't forget to include pictures or your own drawings. Display your poster in your classroom.

Rocks, Soil and Sand



didis (fidis

My rock collection

Make a collection of twelve small rocks that you find interesting. Look for your rocks in your backyard, at parks and playgrounds, at the beach, in the decorative gravel around stores, or anywhere out in nature.

Use a container like a shoe box or egg carton to display them. You might like to place your rocks on top of some cotton wool or crumpled butchers paper to help display them better

For each rock write a label that says where you found it and the date work found it in the each rock in your collection. Ask your teacher where you can also be a contracted.

Did you know? Scientists male and be hard at the second as



the fact that the state of the show for a state of the st

. A Committee of the co

of you have the where you cannot go in its then look in magazines and books for pictures of four different uses for rocks to cake above to passe of them.)

Use your pictures or copies to make a chart about *Uses for Rocks*. Display your poster in the classroom.

Did you know? Scientists make picture charts like this to inform us about the uses of things.

5. Comparing sand and soil

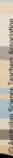
You will need some sand and some soil for this activity.

Observe the sand and soil carefully to answer these questions.

- · What things can you see in the soil? What things can you see in the sand?
- · What does the soil feel like? What does it smell like?
- · What does the sand feel like? What does it smell like?
- What happens when you squeeze the soil in your fist? Does it stay together?
 How about the sand?
- Suggest something that you could add to sand to make it hold together better

Write some sentences about what you have found out.

Did you know? Scientists ask questions to help them work out ways to identify something.





Science on the MOVE



eacher's vitials

Wobbly ball

You will need two beach balls and a partner. Half fill one ball with water and then blow air in it to fill it up. Fill the other ball with just air, (You may ask an adult to help you). Now try these tests with each ball and notice how each one behaves.

- 1) Shake the ball and then try to rest it in one hand. What happens?
- 2) Roll the ball along the ground. How does it roll? Stop the ball. What do you notice?
- 3) Get your partner to throw the ball to you. Is it easy to catch?
- 4) Give the ball it a spin on the ground. Put your hand on the top of it to stor.

Use drawings and sentences to explain what you have to be a little of the little of th

2. Playing with secondice

HAMDIA ON

The same share the same state of the same state

The first transfer of the first of the first

rigidation that the three more threather believe what happens.

What have viring an irom these four races? Give a short talk to your class in what you did and what you found out.

Did you know? Scientists repeat their tests a number of times so they get reliable results.

Surface matters

Roll a ball or a marble along different surfaces to see how far it travels.

You could try surfaces such as carpet, concrete, wood, and tiles. Make sure you give the ball or marble the same amount of push each time. Using a ruler each time, measure the distance from where the ball or marble started to where it finished. Use a table like this to record your results.

Look at your results and write a sentence about what you have

Surface I used Distance the ball or marble went in cm
e.g. carpet 50cm

Did you know? Scientists make

found out.

measurements and look at them to find similarities and differences.



The **Sound** of **Science**



leacher's nitials

1. Vibrations

Sounds are vibrations that our eardrums can feel.

Blow up a balloon and put it next to a fairly loud sound source, like a speaker or a guitar. What happens? Put your hand and cheek up to the sound source and feel the vibrations.

Do the whole test again using a soft sound. What happens to the balloon? Does it behave any differently?

Do the vibrations feel any different? If you answered yes, how do the little of the li

Use drawings and words to show what you did we share a set will a set a continue and soft sounds.

CATACOLOGICAC



A 10 You to the the second of the first order

5. Ingrocking sources

To flear and late the sounds your body makes you will need a plastic funnel, about 80cm of plastic tubing, a large piece of invaluer's paper and a penall or marker.

Make your own stethoscope from the funnel and the plastic tube. Use it to listen to the sounds from different parts of your body (e.g., your heart, stomach etc.)

Lie down on the butcher's paper and ask a friend to trace around your body with the pencil or marker. In this outline of your body, mark where you heard the different sounds.

EXTRA FOR WHIZ KIDS: Find a library book that has a diagram or picture of the organs inside your body and the names of the organs. Which organs do you think you heard making sounds in your body? Write the names of these organs in the outline of your body.





Water Science



eachers utials

1. Using water

Make a chart showing all the ways your family uses water.

Now imagine that there is a great drought and your family can only use about half as much water. Make another chart to show how your family would need to change the way it uses water. Share your charts with your teacher.

2. Where does the water go?

How does water get to the leaves of a plant?

You will need two sticks of celery with this substitute in

TERROTER OF THE PROPERTY OF TH

As a state of court in the second of the sec

out while Line ye round out.

5. Does it dissolve?

Test some cooking ingredients to see which ones dissolve (seem to disappear) in water.

Try things like cornflour, wheat flour, sugar, butter, cooking oil, salt, instant coffee, cocoa and nutmeg.

As well as the ingredients you will need a clear plastic cup, two teaspoons (one for measuring out

the ingredients and one for stirring) and water.

Each time use about half a teaspoon of the ingredient in a cup of water and stir well.

Use a table like this to record your results.

Did you know? Scientist use tables to record their results.

Does it dissolve in water? Yes or No
e.g. salt yes

What is it made of?



acher's lats

1. Synthetic or natural?

Materials are what objects are made from. Materials can be divided into two groups - synthetic (made by humans) and natural. On a large sheet of paper, make a list of at least ten synthetic materials (e.g. plastic) and ten natural materials (e.g. feather). Find other ways that you can classify (put into groups) the synthetic and natural materials e.g. from plants and from animals. Write these down on your paper.

EXTRA FOR WHIZ KIDS: For each material, think of some adjectives to describe the var it has contained by the property of the contained by the property of the contained by the property of the contained by the co

2. Uses for materials

U Challer

Here the same unit is a sum of everything was made of meringue or plastic or paper or shell? Here the same units to get you thinking: Would you still be able to do all the kinds of things you do everyday? How would animals be affected? Would your new world seem crazy?

Divide a piece of paper into four sections and draw four pictures to show what you think your world would be like if made of the four different materials listed above. Show your pictures to your teacher and classmates and tell them about your different worlds.

What will the Weather be like?



Milais Milais

1. Weather journal

Keep your own weather journal for five days.

You will need to copy the following questions and answer them everyday for the five days. (Your teacher might show you a way to make a table to record your observations.)

- 1) is it raining or snowing? If yes, how much rain or snow is there? 2) is it hot or cold? What is the term and the ?
- 3) Does the air feel sticky or dry? 4) Is it windy? If yes, how windy is it? 5) Is it sunny or one with

For each day use your answers to **either** draw a picture of the weather (*wid*) = (*, *) =

Did you know? Scientists in a . Law to wart

in this contribution is the shall be a character of the concept of

L. Charles of

while some in Cr. high strength that shows the direction of the wind and how strong the wind is.

T. Assize your own windsock you will need the cardboard tube from a roll of paper towel, crêpe paper, scissors, ruler, glue, sticky tape and a 30cm piece of string. Cut the cardboard tube in half and give the other half to a friend so they can make a windsock too!

Cut the crêpe paper to make five narrow streamers (about 25cm long). Glue the streamers around one end of the cardboard tube. Sticky tape the ends of the string securely to the other end of the tube. You can decorate your windsock like Spike has with his.

On a windy day use the string to hang your windsock to something like a clothesline or tree branch where it will have room to move.

Observe the direction in which the streamers move. (This shows the wind's direction.)

Observe how much the streamers move. (This shows how strong the wind is.)

Write a sentence or two about what you observed.

EXTRA FOR WHIZ KIDS: Show your classmates how to make a windsock and instruct them how to use it.

Did you know? Windsocks are placed around small airport tarmacs so pilots can observe the direction and strength of the wind.

more than Manney Erren