Topic: Space

Subject: Science

Activity 1 – Galaxy Bottle

Key areas of learning:

- Attention Skills
- Fine Motor
- Communication Skills

What you will need:

- Empty plastic bottle with lid
- Glitter or stars
- 1 cup of water
- Black, purple or blue food colouring
- Baby oil or cooking oil
- Sellotape

Keywords:

Pour, Shake, Stop, Look, Colour, Slowly, Galaxy

What to do:

- Explain to your child they will be making a magical galaxy for space.
- Fill half of the bottle with either of the oils available.
- Add the glitter and the stars to the bottle.
- Add 3 drops of the chosen food colouring into the bottle and mix.
- Slowly pour water into the bottle.
- Put the lid on the bottle and secure with sellotape so the mixture is protected from leaking.
- Shake and explore the 'galaxy'.

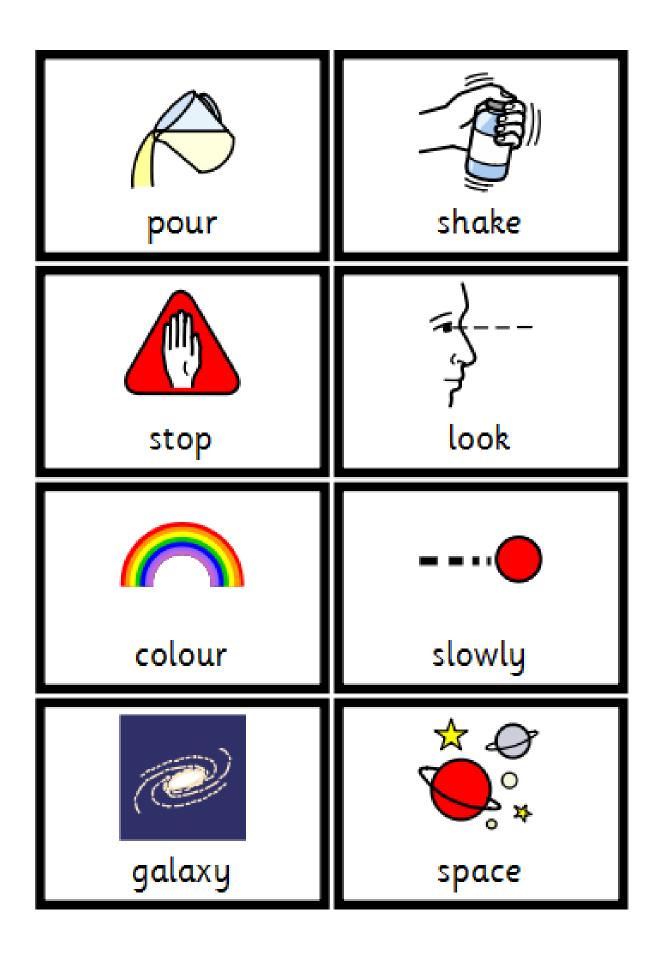
Extension:

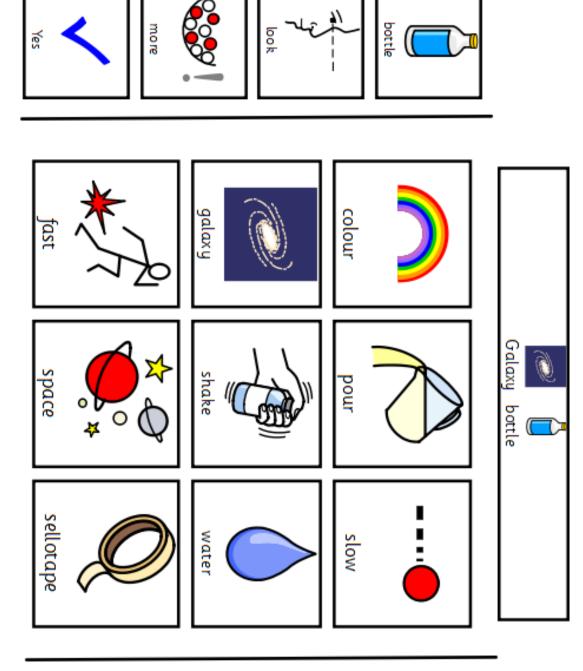
 Use questioning to develop this activity further. Ask questions, such as "what can you see?" and provide instructions, such as "turn it upside down".

- Picture examples (see below)
- Symbols (see below)
- Communication board (see below)













Activity 2 – Craters on the Moon

Key areas of learning:

- Space, shape and measure
- English listening and following instructions
- Communication
- Making predictions
- Changing Materials
- Attention skills

What you will need:

- 8 cups of cornflour
- 1 cup of baby oil or oil
- A plastic box
- Pebbles or stones. Or anything round! (e.g. balls)

Keywords:

Pour, Look, Ready Steady Go, Moon, Craters, Hard, Soft, Dark Light, Wet Dry, High, Low, Fast, Slow, Loud, Quiet

What to do:

- Mix the cornflour and oil in the box. Then pat the cornflour smooth.
- Show your child the pictures of the moon. Ask questions, such as "can you see the dark craters?" Explain that Craters are made when rocks crash into the moon.
- Demonstrate dropping the stones/pebbles into the box. Encourage your child to observe what happens.
- Then it's your child's turn to drop the stones/peddles into the box and observe what happens.

Extension:

- Encourage your child to predict what is going to happen when they drop the pebbles/stones into the box of mixture. (e.g. "will it make a loud or quiet sound?")
- Give your child a choice of how they want to drop the pebble/stone (e.g. from up high or down low).
- Support in vocalising or signing what they can see.

- Pictures of the moon (see below)
- Symbols (see below)
- Questionnaire about craters on the moon (see below)

















Craters on the Moon Science Experiment

You will need:

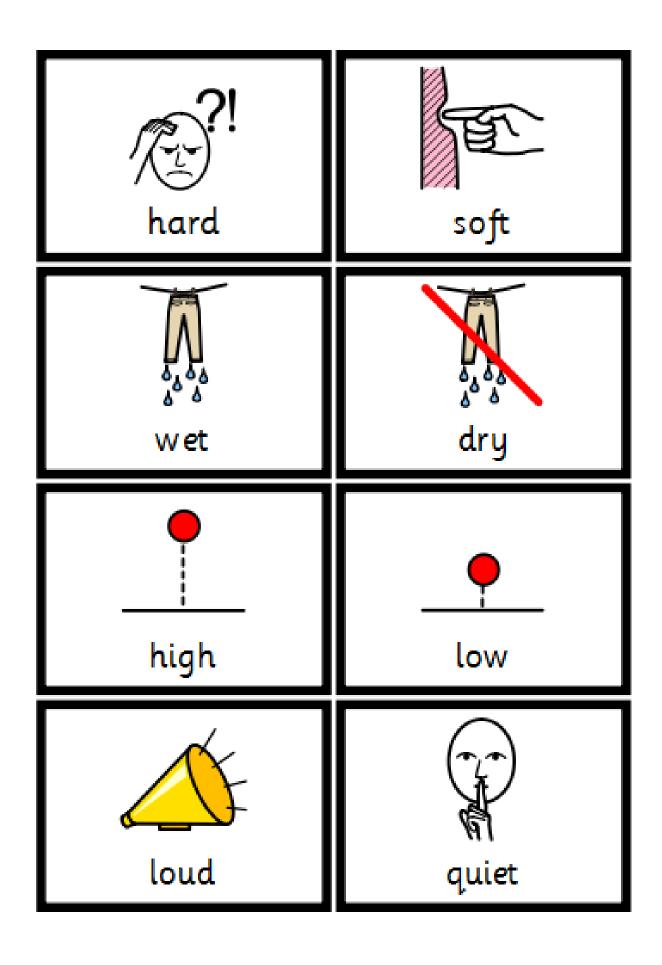
- 8 cups cornflour
- 1 cup baby oil
- Plastic box
- · Pebbles and stones



Method

- Mix the cornflour and baby oil in the box. Then smooth it out to make a level surface.
- 2. Show the children the pictures of the moon. Can they see all the dark craters? Explain that they are made when rocks crash into the moon.
- 3. Explain to the children that they will be making their own craters. Ask the children to stand by the box and drop the pebbles, one by one, into the flour.
- 4. Observe what happens to the flour and the holes that are made.
- 5. Allow the children to experiment with different sizes of pebble and different heights of drop.





Science Experiment Craters on the Moon

How do you think the craters on the moon were made?

What happens when you drop pebbles into the flour mixture?

Does the size of the pebble affect how big the crater is?

Does the height you drop the pebble from affect the size of the crater?



Activity 3 – Balloon Rocket

Key areas of learning:

- Communication
- Fine motor skills
- Independence skills

What you will need:

- Balloon
- Wool or string
- Straw
- Scissors
- Pen
- Masking tape or similar
- Two chairs or similar

Keywords:

Balloon, Rocket, 'Ready, Steady, Go', Fast, Slow

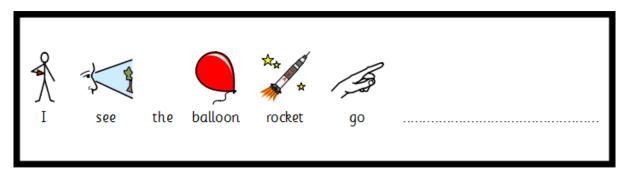
What to do:

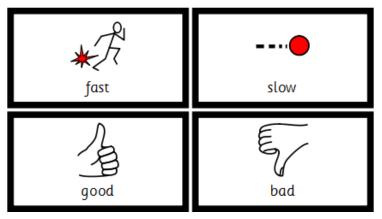
- Tie or tape your wool/string to one chair or a wall.
- Then thread the wool/string through the straw.
- Once the straw is in place, tightly secure the string to the other chair or wall. Now you will see a long piece of wool/string with a straw in the middle.
- Then add a piece of sticky tape to the straw, sticky side exposed. This will be used for securing the balloon.
- Next, take your pen and draw a rocket on your balloon(optional).
- Now blow up your balloon but do not tie the end.
- Attach your balloon to the to the straw using the tape.
- Holding the balloon opening tightly with you hand so no air escapes.
- Pull the straw back to the end of your wool/string, ready to launch your rocket.
- Encourage your child to count down with you to launch the rocket. Ready, steady, go. Or 5, 4, 3, 2, 1 Blast off!
- Visual instructions for the above are available at: https://www.youtube.com/watch?v=NXrLPIxhYBY

Extension:

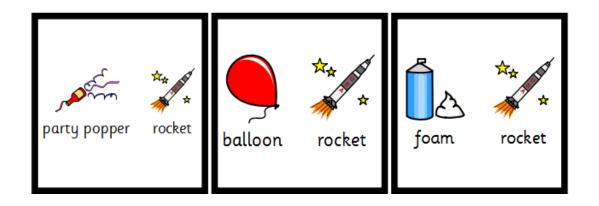
- Encourage child to use observation sheet to predict what they saw and what they have made.
- Make another balloon rocket and have a race.

- Observation sheet (see below)
- Picture example (see below)



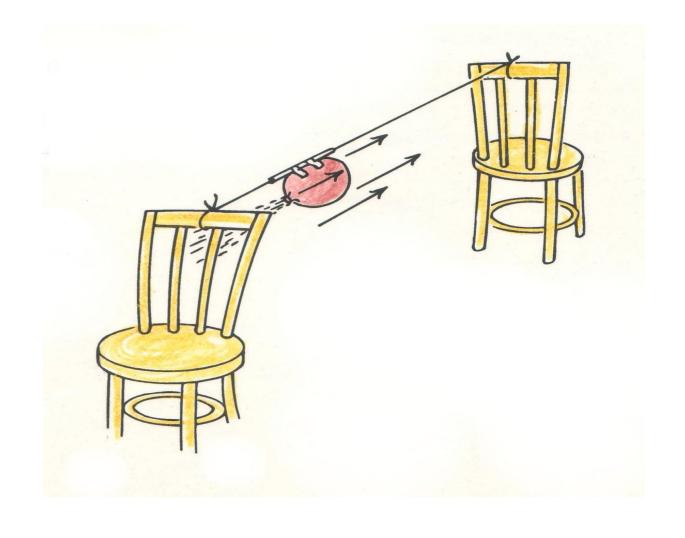












Activity 4 – Fruit Rockets

Key areas of learning:

- Fine motor Skills
- Maths shapes and number
- Communication
- Attention skills

What you will need:

- Wooden skewers
- Knife
- Internet access (optional)
- Strawberries
- Melon
- Big marshmallows



(Fruit can be altered to child's personal preference)

Keywords:

Rocket, Cut, Shape, Push, Down, Fruit, Triangle, Healthy, Unhealthy

What to do:

- Listen to the song 'five little rockets went out one day' via this link: hwbvGD-Q7YA
- Support your child to cut the fruit. If appropriate, cut into specific shapes, e.g. cut strawberries into 3 pieces horizontally and cut melon into a triangle shape.
- Encourage your child to thread through the fruit and marshmallows onto the skewers.
- Support child to make their own rocket shapes.
- Serve and enjoy.

Extension:

- Use questioning to develop this activity further. Ask questions, such as "what shape have you created? Which foods are healthy and unhealthy? How many strawberries can you count? What different colours can you see?"
- Encourage your child to guess and place pictures of different foods into 'healthy' and 'unhealthy' piles.

- Communication board (see below)
- Different types of food (see below)
- 'Healthy and unhealthy' sheet (see below)

