

EARLY YEARS SCIENCE PROVISION MAP

Play, Observe & Ask

Sensory Play

Learn: sorting and grouping using our senses

You need: rattles, shakers, horns, whistles, dataloggers (could be used to measure loudness of sounds)

Explore the different instruments.

Play, observe & ask

- What part of the body do you use to hear?
- Which instrument makes the loudest sound? How do you know?
- What happens if you move further away from the sound source?

Construction

Learn: the properties of different materials

You need: card, paper, tissue paper, tape, party horns, pictures or video clips of vuvuzelas

Design and make a vuvuzela.

Play, observe & ask:

- How can you make a sound with your vuvuzela?
- Which material makes the loudest vuvuzela?

Malleable Play



Learn: the importance of eating healthily

You need: images of healthy food, modelling clay (e.g. Play-Doh*) in various colours, laminated place mats or paper plates

Play observe & ask:

- Can you make a plate of healthy food for a footballer?
- Which healthy foods do you eat?
- What else do we need to stay healthy?

Role Play

Learn: the effects of exercise on the body; similarities and differences between themselves and others

You need: football strips, goalkeeper's gloves, inflatable goal, footballs

Play a variety of energetic games.

Play, observe & ask:

- What happens to your body when you exercise?
- Who can run the fastest? Why do you think this is?
- Who can jump the highest? Why?
- Who can kick the ball the furthest? Why?

FOOTBALL



Water Play



Learn: sinking and floating; sorting according to simple properties

You need: a selection of balls (e.g. golf ball, football, ping pong ball, cricket ball, rugby ball), water tray

Put balls into the water tray.

Play, observe & ask:

- Which balls do you think will float and which will sink?
- Why do you think some balls sink/float?
- What do you think these balls are made of?

Outdoors

Learn: how plants grow

You need: mixed grass seed, cotton wool or soil, water

Dampen the soil/cotton wool and sprinkle on the grass seed.

Observe over the following days/weeks.

Play, observe & ask:

- What do the seeds need to grow?
- What changes can you observe?
- How tall is the grass now?
- How many different types of grass can you see?

Small World

Learn: the names of parts of the body

You need: small world figures or Subbuteo* players, grass mat, small balls, Subbuteo* goals or art straws and modelling clay to construct goals

Play a small world game of football.

Play, observe & ask:

- Which parts of the body do you use to move the ball?
- Which body parts should not touch the ball?

Key Science Vocabulary

body parts - hand, foot, leg, arm, head, etc.

sound, loud, louder, quiet, quieter

healthy, fruit, vegetables, meat, fatty food, sugary food, sugar

exercise, temperature, skin, hot, sweaty, panting

material(s) - plastic, rubber, leather, paper, card, wood

properties of materials - hard, soft, smooth, rough, sink, float

Further Science

Consider other sports and how these use different parts of the body more than others (e.g. tennis requires more arm use than football).

What movements are similar/different?