

## I Can Touch 1 - Mix and Match Playground Games

*Topic:* I can touch – senses

*Time:* 10 mins per game

*Age group:* 4 - 7

### What you need

- The Kia Rapua playground dome frames (x 3)
- The Kia Rapua magnetic texture panels (x 12)
- Kia Rapua Texture charts for recording results and predictions

### What to do

#### Set up

Ask the children to take all the texture panels off the frame & put in a pile or have the textured panels all mixed around on the domes.

#### Game 1 – Match the textures

- This activity builds on the playcentre activity → Introduction to Matching Textures
- Based on what the children know already (if have done them playcentre activity) ask them how the textured panels feel.
- Ask them to group the textures into textures that feel the same and put them on the domes together. How many of each texture (should be groups of 3).

#### Game 2 – Hard versus Soft, Smooth versus Rough

- Talk about hard textures and soft textures.
- Ask the children which are hard textures – ask the children to put all the panels with hard textures on one dome and all the panels with soft textures on the second dome.
- Ask the children what are the differences between the two hard textures and between the two soft textures. This is smooth and rough.
- Ask the children to rearrange the panels so that all the panels with smooth texture are on one dome and all the panels with rough texture are on another dome.

#### Game 3 – Match the shape

- Ask the children to match the panels by shapes that look the same and put them in groups on the dome.
- Ask the children to tell you about the textures that the panels have in each group of shapes – triangles, circles, squares and rectangles.
- You can introduce and talk about the colours here if you want to add another level of matching.

#### Game 4 – Guess the material

- The panels are made of plywood. The four materials used are: plastic loops, neoprene, mirror and sacking weave, some of which are difficult for small children to guess! But ask them what they think each panel is made of.

- It doesn't matter if the children don't get it right, what you want to start here is a conversation about different types of material. Get them to relate the textures to things they are more familiar with in their lives like glass/mirror, sponge, floor mats (plastic loops), carpet etc.

### Game 5 – Other textures in the playground

- Ask the children to identify other textures in the playground and note them down.
  - The dome frames are hard and smooth
  - The water is wet
  - The artificial grass is rough
  - The metal on the music pipes is hard
  - The slide is smooth and hard
  - The foam drumstick is soft
- Ask the children to identify the textures of other things around them. Start to expand their texture vocabulary by 'thinking aloud' and using other texture words like bumpy, scratchy, silky.
- Compare textures of what you have found. What is the softest thing? What is the smoothest thing? Is the mirror smoother or rougher than the slide?

### The Science

Our sense of touch comes from receptors in our skin. The skin is actually the largest organ in the body, covering all of our body surface! Touching something triggers these receptors which then send messages to the brain about the feel and temperature of what is being touched.

### Science talk

#### Description words

Texture, Soft, Hard, Rough, Smooth, Shapes & Colours

#### Science process words

Observe, Compare, Same, Different, Match

#### Open ended questions

- How do the different textures feel?
- Do you know what the different panels are made off?
- What else do you know of that feels the same?

### Skills

Observing, Matching, Recording

### Stay Safe

- Be careful with children moving the panels to and from the domes (trapped fingers etc.)

### Ways to document

There is a panel template on next page which can be printed and coloured in/labelled to document. Can label with textures, shapes and colours (grouped accordingly in template).



### Other science links

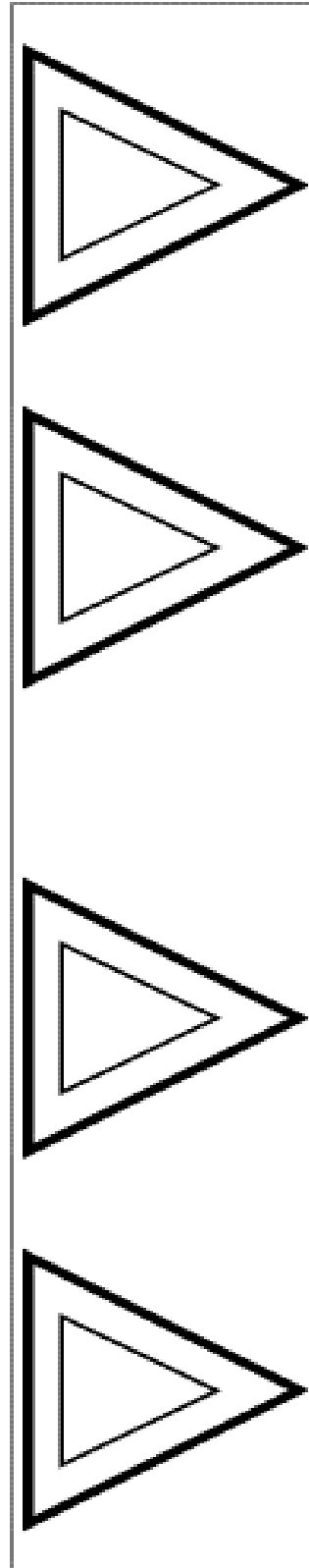
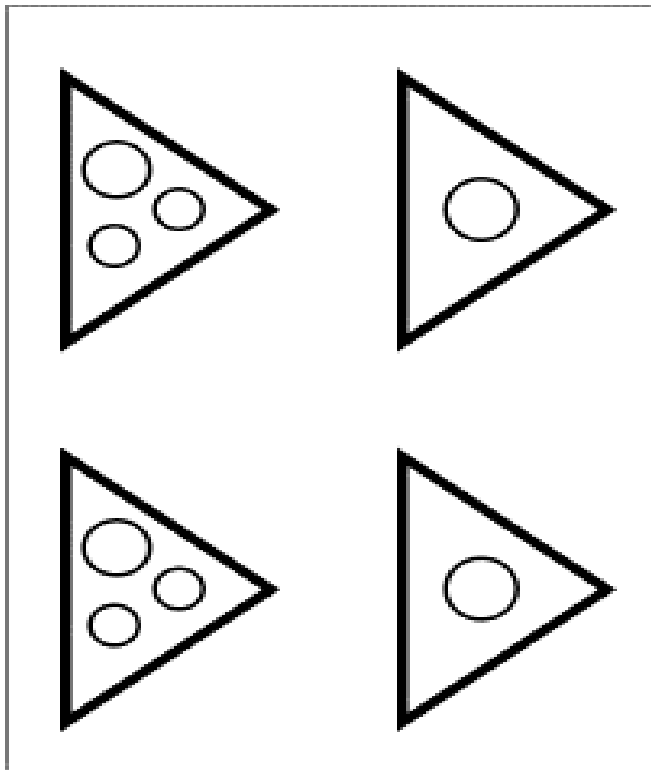
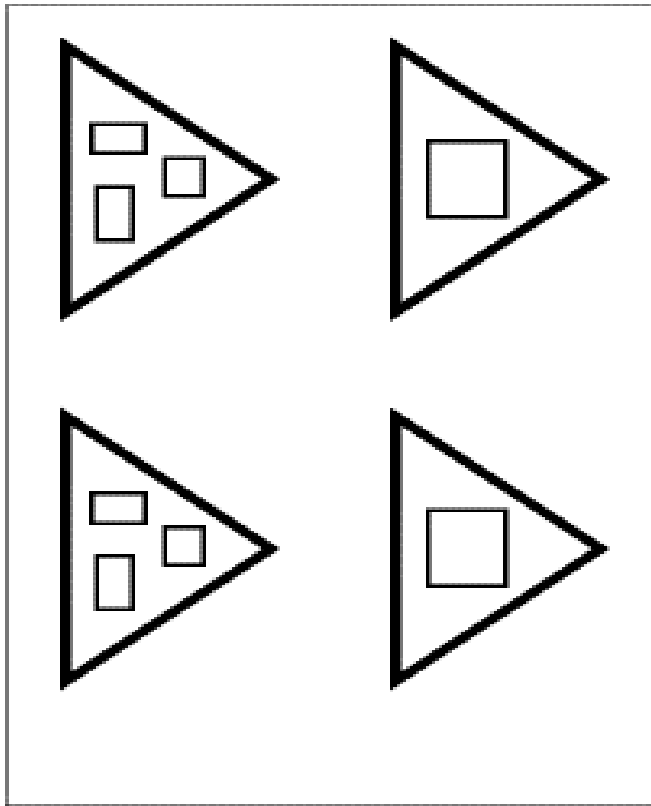
- Shapes
- Colours

### Cross curricular links

Literacy (increasing vocabulary) and Maths (counting and shapes)



KIA RAPUA  
SCIENCE PLAYGROUND



Rough sanding

Mirror

Plastic loop making

Neoprene

## I Can Touch 2 - Our Sense of Touch

*Topic: I can touch – senses*

*Time: 20 mins*

*Age group: 4 - 7*

### What you need

- The Kia Rapua magnetic texture panels (x 12)
- Make a chart for recording results and predictions
- Scarf/headband to act as blindfold

### What to do

#### Set up

Talk about our five main senses – sight, hearing, taste, touch and smell. Which of these can we use in the playground (sight, hearing, touch). Today we will be investigating sight and touch.

#### Activity – Blindfold/eyes closed. Textures

- This activity builds on the playground texture games → mix and match textures
- It is easy to guess the textures because we can see the different colours of the materials. What about if we cannot see the textures anymore? Can we still tell which is hard and which is soft? How?
- Arrange the four triangle panels out on the ground (or any of the sets of four different textures).
- Ask the children to close their eyes and mix the panels around.
- Tell them they are going to use their feet, elbows and fingers to try and figure out the textures of the panels with their eyes closed.
- Ask them to give you predictions on which will be easiest to use to figure out the textures (feet, elbows or fingers)
- With their eyes closed ask them to use their Bare feet, Elbows and then Fingers to figure out what textures are on each panel (hard/soft/rough/smooth)
- Get them to give you guesses as they use each body part.
- Have a discussion. We don't need our eyes to help us detect textures. Our sense of touch is found in our skin.
- Which was easier to use to feel the textures – your feet, elbows or your fingers? We have lots of touch detectors (called receptors) in the skin our fingers so our hands and fingers are very good at detecting textures of different objects. But we also have skin on our feet so we can feel textures there too.

#### Activity 2 – Blindfold/eyes closed. Shapes

- Arrange different panels with different shapes out on the group.
- Ask the children to close their eyes and use their fingers to trace around the shapes.
- Get them to give you guesses as to what the shapes are.
- Our fingers and brain can work together to work out what shapes we are feeling!



## The Science

Our sense of touch comes from receptors in our skin. Some parts of our skin are more sensitive to touch than others, for example; our fingertips, the skin on our face and our lips. This is because there are more touch receptors clustered close together in these areas. Touching something triggers these receptors which then send messages to the brain about the feel and temperature of what is being touched. Our other main senses include sight, hearing, taste and smell. They all have their own ways of taking in information and passing it to the brain but they also interact with each other to give us information about the world around us.

## Science talk

### Description words

Square, Texture, Soft, Hard, Rough, Smooth, Touch, Sight, Receptors

### Science process words

Observe, Compare, Same, Different, Match, Change, Test, Predict

### Open ended questions

- Which body part that you tested was easiest to guess the textures with when your eyes were closed?
- Do you know what the different panels are made off?
- What else do you know of that feels the same?
- How else do we investigate the world around us?

## Skills

Observing, Predicting, Recording, Learning vocabulary & concepts around textures and senses.

## Stay Safe

- Keep the area clear of any sharp objects that the children might step on
- This activity must be supervised

## Ways to document

Use a simple table chart or use a human body outline to label which are the most sensitive parts

## Extending the activity

Talk about different sensations our skin receptors can detect – for example hot and cold – use basins with water of different temperatures to investigate this. Talk about different kinds of textures and investigate them using different materials with and without eyes closed – bumpy, fluffy, sticky, wet, dry etc.

### Other science links

Shape, materials, our senses.

### Cross curricular links

Literacy (increasing vocabulary), mathematics (shapes)



## I Can Touch 2 - Go Seek Textures, Colours and Shapes

*Topic: I can touch – textures*

*Time: 20 mins*

*Age group: 3 - 5*

### What you need

- The Kia Rapua playground dome frames (x 2)
- The Kia Rapua magnetic texture panels (x 12)

### What to do

#### Set up

- Have all the different texture panels set in the Kia Rapua playground dome frames

#### Activity

- This activity builds on the playcentre activity → Texture Hunt
- Based on what the children know already ask them how the textured panels feel.
- Ask them to try to find an object that have a similar texture than the one they are feeling
- Ask them to find an object that have a similar shape than the one in the panel (rectangles, circles or triangles)
- You can also combine this activity with I Can see Theme and ask children to find an object that have a similar colour than the one in the panel and compare whether they have the same shade or if there are lighter or darker.
- To further discuss you can ask the children rearrange the different objects collected by them accordingly, for example from soft to softer, hard to harder, or colours from lightest to darker shades.

### The Science

Our sense of touch comes from receptors in our skin. The skin is actually the largest organ in the body, covering all of our body surface! Some parts of our skin are more sensitive to touch than others, for example; our fingertips, the skin on our face and our lips. This is because there are more touch receptors clustered close together in these areas. Touching something triggers these receptors which then send messages to the brain about the feel and temperature of what is being touched. Our other main senses include sight, hearing, taste and smell. They all have their own ways of taking in information and passing it to the brain but they also interact with each other to give us information about the world around us.

### Science talk

#### Description words

Texture, soft, hard, rough, smooth, square, triangle, circle, lighter, darker.

#### Science process words

*Observe, notice, compare, same, different, match, seek, predict and record.*



### Open ended questions

- How do the different textures feel?
- Do you know what the different panels are made off?

### Skills

Observing, feeling, predicting

### Stay Safe

- Keep an eye on small object to prevent kids from chocking
- Do not use anything with sharp edges that might cut.

### Extending the activity

#### Other science links

Shape, materials, colours.

#### Cross curricular links

- Literacy (increasing vocabulary)