**Sensory treasure hunt**
**Using senses to match objects with similar properties**

Pupils go on a ‘treasure hunt’, preferably outside, using their senses to find objects with properties similar to the objects taken from a lucky dip bag.

Set up the activity by putting objects that have the following characteristics into either one large lucky dip bag or individual bags. Put objects with the same properties in the area where the hunt will take place:

You will need samples with the **following properties**
- hard - hard rock samples, piece of wood, brick
- soft - lump of clay, paper tissues
- stretchy - anything elasticated
- stiff - pencil
- shiny - polished rocks, CD ROM, aluminium foil
- dull - any sample that does not shine
- rough - rough rock samples, e.g. sandstone, piece of wood, brick
- smooth - polished pebbles, piece of polished metal (with no sharp edges), piece of transparent plastic, plastic lid, piece of slate, paper
- bendy - ruler, piece of wire, paper
- not bendy - anything that will not bend!
- waterproof - umbrella material, slate
- not waterproof - ordinary cloth, mudstone
- absorbent - tissues, kitchen roll
- not absorbent - plastic, polythene
- transparent - transparent plastic
- opaque - anything that you cannot see through

Before the pupils begin, it is a good idea to show them similar samples to those in the lucky dip bag and to introduce all the words they will need, (Property word cards, page 3). Demonstrate each property with the correct example.

**Ask the pupils** to take an object from the lucky dip bag and then find an object with similar properties on their ‘treasure hunt’. For example: If the object in the lucky dip bag is hard and rough (rock sample), they should hunt for something that is hard and rough (piece of wood or whatever they can find).

The pupils then return for another ‘lucky dip’ followed by a ‘treasure hunt’.

All the ‘treasure’ collected by the pupils is then displayed on a table. The objects are then grouped according to their characteristics. The ‘Property word cards’ may help. It will become apparent that many objects fall into two, or more, categories.

When they have completed their first groupings, ask the pupils to group the objects into those which are naturally occurring and those which are manufactured.

Now ask the pupils questions about the best material to use in particular circumstances e.g. What is the best material for an umbrella? ...for lining a dog basket? ...for curtains? ...for a bookshelf? ...for a gymnast’s leotard?

Lastly, ask the pupils if they can change the shape of any of the objects e.g. by squashing, bending, twisting, stretching?

---

**The back up:**

**Title:** Sensory treasure hunt

**Subtitle:** Using senses to match objects with similar properties

**Topic:** This activity helps pupils to learn particular properties of a variety of objects.

**Age range of pupils:** 4 - 7 years

**Time needed to complete activity:** 30 minutes

**Pupil learning outcomes:** Pupils can:
- use appropriate vocabulary to describe materials;
- use senses to explore different materials;
- group materials in many different ways;
- explain that there are many ways to group these objects;
- distinguish between naturally-occurring materials and those which are manufactured;
- determine the best material to use in certain circumstances;
- explain that some objects can change shape when squashed, bent, twisted, stretched.
**Context:**
This activity has endless potential and can be used in many ways. It is best carried out outside where there is plenty of space but can equally well be enjoyed in the classroom. Pupils can work at their own pace with the faster and more able investigating uses and other properties such as the object's ability or not to change shape. The words fulfil many literacy requirements and pupils can try to apply them to other objects.

**Following up the activity:**
Pupils could collect five more objects and bring them back to the table, then sort them into their appropriate groups. More able pupils could either fill in a pre-prepared groups list and could see how many times each sample occurred in a group or they could be asked to develop their own lists. They could also suggest uses for all the materials and decide which ones could change shape in similar ways.

**Underlying principles:**
- Samples can be grouped in a variety of ways.
- Many of the samples will fit into more than one group.

**Thinking skill development:** Pupils quickly discover a pattern as they group the objects. Discussion involves metacognition and cognitive conflict is caused when objects fit into two or more groups. Applying the words to objects all around is a bridging skill.

**Resource list:**
- one or more lucky dip bags - preferably opaque
- a range of materials as suggested on page 1
- ‘Property word cards’, page 3.

**Useful Links**
Earthlearningidea Early years:-
‘Pirates and buried treasure’
‘Rock Explorers’
[http://www.earthlearningidea.com](http://www.earthlearningidea.com)

**Source:**
ESEU KS1 Rock Circus
[http://www.earthscienceeducation.com](http://www.earthscienceeducation.com)
<table>
<thead>
<tr>
<th>Property Word Cards</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>hard</td>
<td>bendy</td>
</tr>
<tr>
<td>soft</td>
<td>not bendy</td>
</tr>
<tr>
<td>stretchy</td>
<td>waterproof</td>
</tr>
<tr>
<td>stiff</td>
<td>not waterproof</td>
</tr>
<tr>
<td>shiny</td>
<td>absorbent</td>
</tr>
<tr>
<td>dull</td>
<td>not absorbent</td>
</tr>
<tr>
<td>rough</td>
<td>transparent</td>
</tr>
<tr>
<td>smooth</td>
<td>opaque</td>
</tr>
</tbody>
</table>