**Sorting materials**

**Plastic or not?**

**NC references**

**Science**

Working scientifically

* gathering, recording, classifying and presenting data in a variety of ways to help in answering questions

Materials

* Classify materials according to a variety of properties

**Learning objectives**

Sort and classify objects in a range of ways

Understand and apply the terms, man-made/ synthetic, natural, recycle, biodegrade

**Teaching ideas**

This lesson could be an introduction to materials and their properties or could follow on from investigating

**Explore**

Give the children a range of objects/materials or pictures of materials to sort. Include the 4 main plastic polluters: drinking straws, single-use plastic bottles, carrier bags, disposable coffee cups. Other objects may contain the following materials: cardboard, paper, wood, felt, newspaper, different metals, glass, ceramic.

Ask the children to sort the materials into groups and look at the categories and vocabulary they use.

**Classify**

Introduce vocabulary: recycle, biodegrade, synthetic/ man-made, natural.

Ask the children to sort the materials using this vocabulary and encourage their own methods of recording.

Photographs of groups could be used to record the children’s learning or they may create their own tables or Venn diagrams to sort the items.

Extend learning by using Carroll diagrams:

|  |  |  |
| --- | --- | --- |
|  | natural | man-made |
| Biodegrades |  |  |
| Does not biodegrade |  |  |

|  |  |  |
| --- | --- | --- |
|  | natural | man-made |
| Can be recycled |  |  |
| Cannot be recycled |  |  |

What conclusions can the children make about different materials? Are there any patterns? Do man-made materials biodegrade? Can you recycle natural materials?

**Resources**

Objects/ materials to sort

Recording templates if required

**Next steps**

Use this activity to increase the children’s awareness of recycling and reducing the use of single-use plastic.

Follow up with research about the recycling process and a campaign to reduce plastic waste and/ or increase recycling in the school or community.