

Rainbow Collectors Session plan/ideas

<https://primarylibrary.crestawards.org/all-star-challenges/61746949/40>

In this activity, children will think about colours in nature/in their environment, and collect items to make their own rainbow.

Plan

1. Introduce the activity by reading out the story on the activity card.
2. Ask the children what they think they'll be investigating based on the story.
3. Discuss the colours in a rainbow. Use the spectral glasses to see how white light can be split into the colours of the rainbow - raindrops do something similar to sunlight (<https://www.real-world-physics-problems.com/diffraction-glasses.html>)
4. Explain that their next task is to go outside and collect things in all the different colours of the rainbow (e.g. flowers, leaves, safe litter).
5. Give out plastic bags to collect what they find, and head outside!
6. Once back inside, explain that the task is to display what they've found as a rainbow on their sheet of paper. It can help to draw lines for each colour of the rainbow in pencil first. The rainbow materials can be stuck down with sellotape and/or take a photo (just remember to write their names).
7. Make sure everyone washes their hands.
8. As a class, discuss which colours were easy/hard to find and why, and how their rainbows might look different in different seasons.
9. Suggest/discuss occupations and situations that might require the skills/knowledge they've developed e.g.
 - a. Astrophysicists - the colour of stars tells us how hot they are and what chemicals they are made of.
 - b. Chemists and forensic scientists - the colours given off by heated chemicals can tell us what substances are made of.
 - c. Lighting designers - for stage sets, shops, exhibitions.
 - d. Animals - some animals can see colours we can't, like UV and infrared.
10. Discuss related activities they could do (at home).
11. Give out stickers/stamps for their passport.

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Tips and safety

- Discuss what objects are safe and not safe to pick up e.g.
 - Do not pick up anything that is not loose e.g. do not tear plants apart
 - Ask first, or avoid, picking up berries
 - Do not pick up live creatures, even minibeasts such as ladybirds
 - Do not put anything in your mouth
- Wash hands thoroughly afterwards.

Additional ideas/extension/home activities

- Use the objects you found (or find some more) to play a game of Guess Who!
<https://scienceoxford.com/resources/science-oxford-challenges/make-your-own-garden-version-of-the-game-guess-who/>
- Learn about the colour indigo: Sir Isaac Newton and a friend were the first to use the name indigo to describe a shade between blue and violet they could see in the spectra they created. Until then indigo was the name of a dye, not a spectral colour (<https://en.wikipedia.org/wiki/Indigo>).

Rainbow Collectors

Today we are thinking about **COLOUR**

Can you write the rest of the colours of the rainbow?

Red

O

Y

G

B

I

V

Can you think of things in your home that are the different colours of the rainbow?



Rainbow Collectors

Design a garden or outdoor space using all the colours of the rainbow.

