SunSpaceArt – WS9
Art Worksheet – collographic printing

Background
The SunSpaceArt project aims to inspire children and to develop creativity. The project brings together arts and science learning (STEAM). The team comprises scientists, space ambassadors and artists. The project is funded by the Science and Technology Facilities Council. For more information, see the www.sunspaceart.org website or contact info@sunspaceart.

This art worksheet is designed for teachers to deliver SunSpaceArt lessons independently.
Level: Year 5/6
Grade: Key stage 2
Class size: 15-20

Materials:
- stiff pieces of cardboard of varying shapes and sizes from A5-A4 (e.g. the back of a good quality sketchpad)
- thin cardboard and textured materials for collage (e.g. string, tinfoil, corrugated card, textured fabric, scrim, bubble wrap, sand paper)
- scissors
- PVA glue
- brushes of different sizes
- water-based printing inks, button polish/shellac
- watercolour paints
- plain & colour paper
- newsprint
- kitchen roll
- latex gloves.

Additional resources
- Sun and space presentation
- Sun facts - www.suntrek.org

Extension activity
- Create a wall display with different prints.

Introduction
The purpose of this activity is for students to create original prints about the Sun, Solar System and space. Approximate time for this activity: it is best to split the activity into two parts - with 1hr making the plates, 2-3hrs applying button polish and leaving that to dry, then 1hr printing the plates, ideally the next day.

Workshop plan

Sun presentation (45 min)
Share information about the Sun and space, with images and videos: including information about NASA’s Parker Solar Probe and ESA’s Solar Orbiter, Tim Peake, Moon landings etc. Include interactive questions and discussion with children.

Art workshop – first session (1 hr)
The children should first make designs of their ideas and then make printing plates following the step 1 below. The printing plates can themselves be very beautiful and creative. The teacher then needs to follow step 2 and allow the plates to dry for 2-3 hours.

Art workshop – second session (30 mins)
The children can choose the colour they wish to print with and follow steps 3-4. They can use a different colour and make a display of their prints.

Show and tell, plus feedback (15 min)
Display the artworks on tables for children to look at (2 min). Ask a volunteer to talk about another student’s work, which they find inspiring. Then ask the student how they made the work. Repeat this several times. (10 min). Ask the children to write feedback (on post-it notes or forms) of what they have learnt and how they might explore this further (3 min).
Collograph printing: Step-by-Step

**Step 1**
Use the thick piece of cardboard as the base or ‘plate’ of the print. Draw a design on the cardboard. Cut and arrange the cardboard and other collage material to make your print plate design. Securely fix this to the plate with PVA glue. Try to keep the materials to approximately the same depth. Leave the print plate to dry for about 2-3 hrs.

**Step 2**
TEACHER/ADULT
Wearing latex gloves in a well-ventilated area, use the button polish / shellac on the kitchen roll to cover the plate front and back. We recommend that the teacher undertake this step. Leave the plate to dry. This could take about 2hrs, or ideally overnight.

**Step 3**
Once the plate is dry, paint the printing ink onto it. This can be all one colour or different colours in different areas.

**Step 4**
Place the plate face down on plain or colour paper. Press down evenly. Then carefully turn the plate and paper over together. Press the paper into the plate, as if making a rubbing. The more the paper is pressed into the plate, the more ink will be transferred. Peel the paper off. There may be enough ink to make a second print. It can work well to do a second print on thin paper e.g. newsprint. Leave the print to dry for about 2hrs or ideally overnight.

**Step 5**
Once the print is dry, it is possible to add to it, for example, with watercolour.

**Examples**