

Japace MDSC08

Japace Science Advent Calendar 2025 Instruction Manual

Model: MDSC08 | Brand: Japace

INTRODUCTION

The Japace Science Advent Calendar 2025 offers 24 unique science experiments designed to engage and educate children. This manual provides essential information for setting up, operating, and maintaining your advent calendar, ensuring a safe and enriching experience.

Each day leading up to Christmas, a new experiment is revealed, providing hands-on learning opportunities in various scientific fields.



Figure 1: The Japace Science Advent Calendar 2025 box, illustrating various experiments such as crystal growing, geode breaking, and slime creation.

SAFETY INFORMATION

WARNING: Adult supervision is required for all experiments.

- **Not a food:** Materials labeled as 'Candy' or other food-like substances are for experimental use only and are **not safe for consumption**. Do not eat or drink any contents of this kit.
- **Eye irritant:** Avoid contact with eyes. In case of contact, rinse thoroughly with water and seek medical attention if irritation persists.
- Keep all contents out of reach of small children and pets.
- Some experiments may involve small parts or chemicals that require careful handling. Follow all instructions precisely.
- Use caution with hot water as indicated in specific experiments to avoid scalding.

SETUP

1. Carefully unbox the Japace Science Advent Calendar.
2. Locate the instruction booklet, which is typically secured within the calendar box.
3. Familiarize yourself with the layout of the calendar, noting the numbered compartments for each day and the dedicated 'Science Tools' section.
4. Prepare a clean, flat workspace, preferably covered, to conduct experiments.



Figure 2: The advent calendar box features a Velcro design to securely hold the instruction manual, ensuring it is always accessible.

OPERATING INSTRUCTIONS

Each day, open the corresponding numbered compartment to reveal the materials for that day's experiment. Refer to the instruction booklet for detailed, step-by-step guidance.

The 'Science Tools' section contains reusable items such as measuring cups, droppers, and stir rods, which may be used across multiple experiments.



Figure 3: A child following the clearly illustrated instructions in the manual to perform an experiment.

Experiment Examples

Below are a few examples of the types of experiments included in your calendar:

- **Day 1: Crystal Growing Tree**

Assemble the tree-shaped paper cards and place them in the provided plate. Pour the crystal growing liquid into the measuring cup, then use a dropper to apply the liquid to the tree. Observe as crystals form over 12-24 hours. This experiment demonstrates capillary action and crystal formation.

- **Day 7: Rainbow Ferris Wheel**

Arrange the provided candy pieces in a circle on a white dinner plate. Carefully pour about 30ml of clean water into the center of the plate, ensuring the water level is even with the candy. Observe as the colors diffuse from the candies into the water, creating a vibrant rainbow effect. This illustrates diffusion and solubility.

- **Day 10: Magnetic Tree**

Place the round magnet flat on a table. Carefully add the provided nuts on top of the magnet, one by one, to build a magnetic tree structure. This experiment explores magnetism and magnetic fields.

- **Day 15: Discover Crystal Inside (Geode Dig)**

Place a geode (included) inside a sock or cloth. Firmly tap the geode with a hammer until it breaks open. Carefully pour out the broken pieces to reveal the beautiful crystals inside. This activity introduces geology and mineralogy.

- **Slime & Oobleck Creation**

Using ingredients like liquid borax, glue, and color agents, follow the instructions to create various types of slime. For Oobleck, combine cornstarch (flour) and water to observe its non-Newtonian fluid properties. These experiments teach about polymers and states of matter.

- **Waterproof Finger**

This experiment uses aerogel powder to demonstrate hydrophobic properties. By coating a finger with the powder and dipping it into water, the finger remains dry, illustrating how certain substances repel water.

Video 1: An overview of the Japace Science Advent Calendar, showcasing various experiments like crystal growing, slime, and color-changing liquids. This video is provided by Japace.

MAINTENANCE

- After each experiment, dispose of waste materials responsibly according to local guidelines.
- Clean reusable tools (measuring cups, droppers, stir rods) with water and mild soap, then dry thoroughly before storing.
- Store the advent calendar and any remaining materials in a cool, dry place away from direct sunlight.

TROUBLESHOOTING

- **Missing or unclear instructions:** If you find any instructions missing or unclear, please refer to the full instruction booklet provided with the kit. If issues persist, contact Japace customer support.
- **Experiment not working as expected:** Double-check all steps in the instruction booklet. Ensure correct measurements and conditions (e.g., water temperature). Some experiments may require specific waiting times.
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