

GENESIS MISSION SPACECRAFT MODEL

Supplies Needed:

- Printed model components (see below)
- Scissors
- Clear tape or glue (a glue stick works well)
- Toothpick or a short piece of pipe cleaner
- Markers, colored pencils, or crayons (optional)

To Assemble the Genesis Spacecraft Model:

The model has two parts: the **Spacecraft Bus**, and the **Sam Return Capsule with Science Canister**.

- 1. Take out the Spacecraft Bus sheet.
- 2. Color the spacecraft pieces (optional).
- 3. Carefully cut out the Spacecraft Bus.
- 4. Fold the Spacecraft Bus on the dotted line and glue or tape the Spacecraft Bus front and back together, being careful to line up the two pieces so that they match.
- 5. Take out the Sample Return Capsule with Science Canister sheet.
- 6. Cut out the Sample Return Capsule, the Science Canister and its four Collector Arrays.
- 7. Curve the side of the Science Canister, glue or tape on the overlap, and glue or tape the edges to the base.
- 8. Curve the side of the Sample Return Capsule, glue or tape on the overlap, and glue or tape the edges to the base.
- 9. Push a toothpick or pipe cleaner through the darkened circle on the Spacecraft Bus.
- 10. Place the Sample Return Capsule on top of the Spacecraft Bus and secure by pushing the toothpick or pipe cleaner through the darkened circle on the base of the Sample Return Capsule.
- 11. Place the Science Canister inside the Sample Return Capsule and secure by pushing the toothpick or pipe cleaner through the darkened circle on the base.
- 12. Secure the four Collector Arrays by pushing the toothpick or pipe cleaner through the darkened circles, placing the arrays in numerical order. The arrays should be inside the Science Canister.

The Finished Piece:

While the Genesis spacecraft is gathering samples, the lids of the Science Canister and Sample Return Capsule will be open. The four Collector Arrays can spread out individually. When the spacecraft is ready to return to Earth, the Collector Arrays will be stored inside the Science Canister, which will be inside the Sample Return Capsule.



Genesis is managed for NASA's Space Science Division by the Jet Propulsion Laboratory (JPL), a division of the California Institute of Technology (Caltech). Genesis is a collaborative partnership made up of the California Institute of Technology, the Jet Propulsion Laboratory, Lockheed Martin Astronautics, NASA Johnson Space Center, and Los Alamos National Laboratory. The Genesis mission is the fifth chosen for NASA's Discovery Program. Genesis education materials are developed under contract by Mid-continent Research for Education and Learning (McREL), Aurora, CO.