

Activity: Learning the parts and functions of a spacesuit

Distribute the Valesare drawing. Ask students: What special clothing must an astronaut wear? Why? Identify each part of the spacesuit. Have students copy the correct identities on their drawing. Discuss the function of each part. Children can list the functions on a separate sheet of paper.

Activity: I want to be an astronaut!

The day before this activity ask students to bring to class a small photo of themselves. Distribute a fresh copy of Valesare's spacesuit. Ask students: Could you picture yourself in a spacesuit? Have students color in Valesare's spacesuit. Next have them paste their photo in the area of the helmet. Now direct the students to write their name in the box on the front of the spacesuit.

Activity: How can we fly?

After collecting the students spacesuits, copy each on sheets of plain 8 ½ inch x 11 inch white paper.

Ask students: Have you ever flown a kite? What did it look like? Display a pre-made purchased or self-made kite. At this point you may want to tell students a little about the history of kites. You might include the fact that kites have been made in the Orient for thousands of years and at one time were used during warfare. A mention of the work of Benjamin Franklin might also be included.

Distribute a list of "kite" vocabulary words. Using the pre-made kite show, identify, and explain the function of each part.

Ask students: What makes a kite fly? (The thoroughness of your explanation depends upon the grade level and ability of your students.) Simply stated a kite flies because the wind blowing against the face of the kite pushes upward with a force greater than the downward gravitational pull. The kite deflects the flow of air. As the wind passes over a kite, the air on top must go farther than the air on the bottom, in the same amount of time. The air on top must speed up, and this decreases pressure over the kite. Air will move from an area of high pressure toward an area of low pressure. As a result the higher pressure air under the kite will push up, providing lift. (You can talk about Newton's Third Law of Motion at this point and also Daniel Bernuolli's principle that the pressure in a moving stream of fluid [air] is less than the pressure in the surrounding fluid [air].)