# **GRADES**



#### **Materials:**

Activities Cardboard Cloud photos Markers Tape

Worksheets
Aviation cloud chart

#### **Key Terms:**

Cirrus
Cirrocumulus
Cirrostratus
Altocumulus
Altostratus
Nimbostratus
Stratocumulus
Stratus
Cumulus
Cumulonimbus

Supported by Hoi Ko
Department Chair
Aviation Maintenance Technology
College of Alameda

## **Exploring Clouds**

## **Objective:**

Students will learn about different types of clouds and how they affect the weather and flights.

### **Activity Overview:**

Students will explore different types of clouds and their effects on the weather, make a cloud categorizer, and discuss how clouds affect airplanes during takeoff, landing and cruising.

### **Activities:**

- 1. Introduction
  - Ask students how they decided what to wear today (possible answers: sunshine, wind, clouds)
  - Ask students if they have heard of the expression "Red skies in the morning, sailors take warning? Red skies at night, sailors' delight."
- 2. Different types of clouds
  - Students learn about types of clouds that form at different levels and the weather conditions associated with each type.
  - Have students discuss in groups what types of clouds are associated with nice weather and severe weather.
- 3. Make a cloud categorizer
  - Each group of students (3-4) is given a piece of cardboard and pictures of different types of clouds. Instruct students to cut out the center rectangle.
  - Students try to recognize the types of clouds and tape the cloud photos to the card board and name each one.
  - Have students put the cardboard up and look at the clouds through the center hole, identify the clouds and how they affect the weather.
- 4. Discussion
  - What types of clouds affect aircraft during takeoff, landing and cruising?
  - What type of clouds would concern a pilot most? Cumulonimbus

#### References:

https://www.teachengineering.org/lessons/view/cub\_weather\_lesson04 http://brisbanehotairballooning.com.au

https://smmartideas.blogspot.com/search/label/Cloud%20Categorizer