OBJECTIVE:
Determine which runway is best suited for an aircraft to takeoff based upon wind.

LESSON:
- Airplanes take off into (against) the wind to produce the greatest amount of lift.
- It’s important to choose a runway that is aligned with the direction from which the wind is blowing.
- Most airports have a windsock, which shows the direction the wind is coming from.

ACTIVITY:
**Determine which runway the aircraft will use for takeoff with the depicted wind.**
- Use multiple airport runway layouts like the ones pictured below. These can be pictures on a PowerPoint slide or Word document, printed copy, or 3D model. Note that the examples only need the solid runway markings—taxiways, airport buildings, and other objects do not need to be included.
Next to each airport layout, have a wind sock (see example pictured below). The wind sock will need to be a 3D image to easily show wind direction. A wind indicator, or “arrow” (pictured below), will also help clarify wind direction.

Have students discuss and determine which runway to use for takeoff.