Laura McShane

**Helicopters LIFT!** 50 min

**Objective:**
Understand role of helicopters in transport

**Big Idea:**
Aircraft carry people and things - how are helicopters different from airplanes?

**1. Warm Up / Anticipatory** 15 min

Share [High-Flying Helicopters](http://wg.wonderopolis.org/lessons/high-flying-helicopters) by Tony Mitton and illustrated by Ant Parker
How do airplanes fly? Gravity pulls airplanes down.
Airplanes need wings in order to create lift. Lift pushes against gravity. Air creates lift by flowing around the airplane's wings. The plane must gain speed to push the air around the wings. Propellers or jet engines also push or pull the plane forward. This is called thrust.

2. Investigation and New Learning 15 min

Review vocabulary:
- Rotor blades
- Propeller
- Pilot
- Cockpit
- Cabin
- Controls - Collective/Cyclic
- Skids
- Tail Boom
- Lift
- Thrust

Compare helicopters and planes - what have you learned?

3. Review & Check for Understanding 30 min

Make your own Rotor blade:
https://www.exploratorium.edu/science_explorer/rot...

Take the Wonder Quiz:
https://wonderopolis.org/wonder/how-do-helicopters...