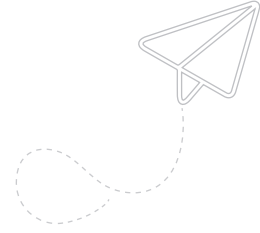


Aviation

L2 Yaw, Roll, and Pitch



Set the Stage: [The Paper Airplane Guy](#), video: 11 minutes and 3 seconds, a jaw dropping video!

Resources: Paper Plane Designs, a static webpage of plane designs. Attached plane designs.

Activity: What is Yaw, Roll, and Pitch and how do they affect flight??

Procedure: After the intro video – Use the link above in the resource section to view paper plane designs. They are organized into hard, medium, and easy levels.

- Help your child customize and build their paper airplane with markers. As the students are creating their planes you can replay the “Paper Airplane Guy” video above if needed.
- After your child creates their paper airplane, give them time to test.
- Instruct your child to cut 1 flap on each wing. Flap sizes will vary depending on students’ designs.
- Have your child attempt to mimic, yaw, pitch, and roll.

Materials

- Computer and access to the Internet
- Printer Paper
- Markers

Standards

Standards addressed by this activity - BSB – The Do Place: Academic Standards: SC8/1/3.B, SC8/1/3.C, SC8/4/3.A, SC8/1/4.3.C, National Standards: ISTE – 4A, Benchmark: B/E2, 4B/E4, 3B/M4B, and NGSS: 3-5-ETS1.B.3, 3-5-ETS1.C.1, MS ETS1.B.3, 4-ETS1.B.2, 3-5-ETS1.B.1, MS-ETS1.B.6, MS-ETS1.B.1, and K-2-ETS1.C.1.