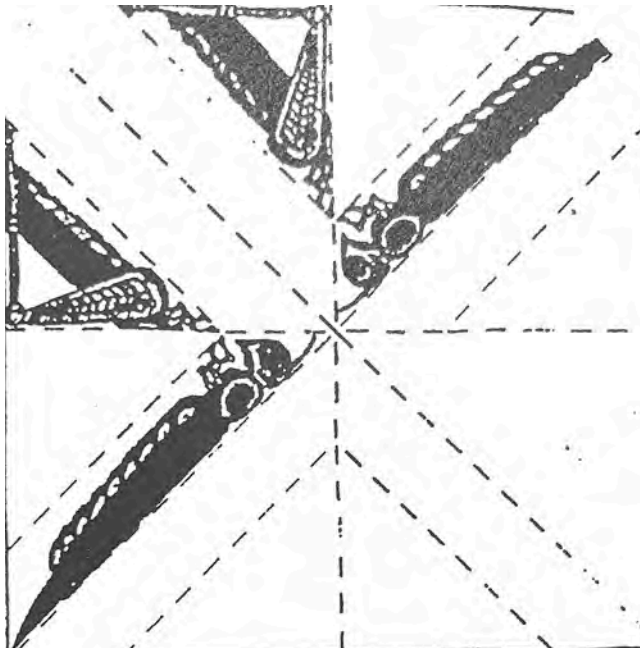
LOG 1: Mission to Mars: Acrobats on their way to Mars



Questions to think about:

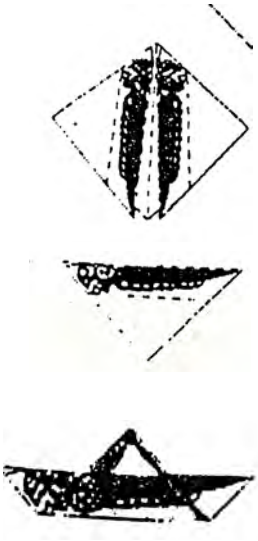
- Could you do flips in space?
- How would you push off and land?

What You Need

- Grasshopper pattern or a post-it note.

What You Will Do

- Cut out the grasshopper pattern or use any square sheet of paper. A 2-inch post-it note works great.
- Follow these directions:



1. Fold the square into a triangle with art on one side.
2. Fold the tips of the triangle toward the center to create this fold.
3. Fold along the middle to create this triangle.
4. Fold back up the legs for your finished grasshopper.
5. Tap the grasshopper on the nose or wing tips and watch it flip.

6. Watch the video of John Casper playing with the grasshopper in space.

What Did You Discover?

Gymnastic feats depend on gravity and are limited by gravity's pull. Flipping in space is wonderful because you don't fall to Earth. Acrobatic twists and turns can happen all across your spacecraft. However, gymnasts depend on gravity to push off for their jumps. How can our space grasshopper get the push to start spinning? What happens if a gymnast doesn't make it to the other side?