

# Water in a Bucket

**Estimated Time for Activity:** ~5 minutes

**Optional Objectives:**

*The students will:*

- Understand the concept of centripetal acceleration.

**Materials:**

- Bucket
- Water

**Optional Vocabulary:**

- Circular motion
- Centripetal acceleration

**Procedures:**

- Put enough water in the bucket to cover the bottom and make depth of water about 1" deep.
- Ask the students what would happen if you swing the water around (like a softball pitch).
- Swing the bucket and observe that if it is done fast enough, the water stays in the bucket, even above your head.

**Optional Post-Activity Question(s):**

- What makes the water stay in the bucket?