

Rock-it Science Observations For Winter Lessons 2010

Water Clocks

Students assembled a cup on top of a box so that it could drip water onto a spoon teeter-totter throwing it off-balance. When just the right weight is added, the teeter-totter will fill and pour water like clockwork.

Students may have noticed:

- The water would fill the spoon and the spoon would go down and not come back up.
- Adding weight to the other side would allow the spoon to return.
- Too much weight and the spoon would never go down.
- Carefully adjusting the weight could make it so that the spoon would go back up every 30 seconds.
- Weight added further from the pivot point had a bigger effect.
- Some cups dripped water like individual drops and some made a thin stream of water.
- Thin, almost invisible strands of hot glue were strong enough to stop the spoon from moving.