**Everyday Engineering**

**Light Maze**

**What you need:**
- flashlight
- reflective objects (cans, foil, stainless steel cookware, unbreakable mirrors)

**What you do:**
1. Place the flashlight on a table in a darkened room.
2. Spread reflective objects out on the table.
3. Point the flashlight towards an object on the table and observe where the light beam goes. Can you make it go in opposite direction?

**Things to try:**
- Test different reflective objects. Do some work better than others?
- Can you hit a target? Place an item like a cup or apple on the table and try to get the light to hit it without pointing the flashlight directly on it.
- How many objects can you bounce the light off of before it is too dim to see?
- Try adding a clear, but colored object like a green plastic bottle or plastic food storage lid. Or, add objects with holes like a basket or potato masher. What happens to the light when you shine it through these items?