



GIZMOS AND GADGETS

RATIONALE FOR ADVENTURE

Gadgets are designed to make tasks easier. Think about the difference between a can opener you turn and one that plugs into the wall. Computers are designed to move information around quickly. Some gizmos and gadgets are designed just for fun, like games or apps. They all start with moving parts. Can you make a gadget?



TAKEAWAYS

- Learning about gadgets and time-saving devices
- Learning about gizmos designed just for fun

CONNECTIONS WITH DESIRED OUTCOMES

- Character development
- Personal fitness

REQUIREMENTS

1. Explore properties of motion.
2. Explore properties of force.
3. Use household materials to create a useful object.

MEETING 1 PLAN

PREPARATION AND MATERIALS NEEDED

- One 1-gallon milk jug per Scout with the bottom cut out
- Beanbags or other items to toss
- Magazines, scissors, glue, construction paper
- Pre-make and bring "Genius Kits" (Limit the kit to six to eight items and place in paper bags. Suggestions include: ice cream sticks, marbles, cork, glue, aluminum foil, chenille stems, golf tee, wire hanger, nuts and bolts, washers, screws, etc.)
- Drinking straws, ping-pong balls, dominoes

GATHERING

- **Milk Jug Toss:** Collect enough 1-gallon milk jugs for each Scout to have one. Cut out the bottom of the jug, and leave the handle intact. Use the milk jugs to play catch with beanbags, ping-pong balls, tennis balls, etc. As the Scouts develop some skills in catching the objects, increase the challenge by switching to a different item to catch.

OPENING

- Select a Lion to light the Good Conduct Candle.
- As a group, recite the Pledge of Allegiance and the Scout Oath.



TALK TIME

- Carry out business items for the den:
 - Dues
 - Notification/reminder for the upcoming outing
 - Meeting information: Orient Scouts as to what to expect at this meeting.
- Allow time for sharing among Lion Scouts.

ACTIVITIES

Den Leader Note: There are more activities presented here than can be completed during a single den meeting. Select in advance and prepare to present any three of these activities.

Activity 1: Rolling Investigation

- Collect many different-sized balls, cylinders, pipes, and other similar items to use to investigate movement. Have Lions observe as you roll them down an incline.
- Ask Lions questions such as these: Which ones roll faster—solid objects or hollow objects? Cylinders or spheres? Objects with large diameters or small diameters? When they roll down the incline, which one rolls the farthest? When they are pushed across the floor, do they roll at the same rate?

Activity 2: Ping-Pong Ball Races

- Have Lions blow through a straw to move a ping-pong ball across a table.
- Next, have them try to blow the ping-pong ball into a domino standing on its side. Can they knock the domino over? Can they knock over more than one domino by blowing the ping-pong ball?

Activity 3: Neckerchief Slide

- Explain that wearing a neckerchief is an important part of Scouting that begins at the Tiger rank. To prepare them for becoming Tigers, the Lions are going to make neckerchief slides.
- Make a neckerchief slide from PVC, computer parts, washers, bolts, and screws.
- Use craft glue to attach items to a 2- to 3-inch piece of schedule 20 PVC to create a neckerchief slide.
- If you use a hot glue gun, have the adult partner help the boy to attach the objects.

Activity 4: Genius Kits

- Provide each Lion and his adult partner one of the “genius kits” already made. The bag will contain items such as loose gears, twine, nuts and bolts, washers, marbles, etc. Each “genius kit” should contain six to eight identical items.
- Have each pair put together a “gadget” with the items provided in the “genius kit.” Have the Lions show their gadget to the rest of the den. Can the gadgets all be added together to make one BIG gadget?
- This activity should take no longer than 10 minutes, or can be one that each Scout and adult partner pair takes home to work on and brings back to the next den meeting.



Activity 5: Gadget Collage

- Have Lions look through magazines, and cut out pictures of gadgets that make tasks easier. As a den, make a poster to share at the next pack meeting the Lions will attend.

Activity Wrap-up

- Have Scouts complete the task on the Gizmos and Gadgets page of the *Lion Adventure Book*.

CLOSING

- As a group, recite the Scout Law.

AFTER THE MEETING

- Ensure cleanup takes place.
- Serve refreshments, if desired.

MEETING 2 PLAN (DEN OUTING)

PREPARATION AND MATERIALS NEEDED

- Depending on the distance to the location of the outing, permission slips and transportation may need to be arranged.

GATHERING

- Gather all the Lion Scouts and adult partners and discuss appropriate behavior for the outing. For example, Lions will be instructed not to touch items unless directed to do so.

TRANSPORTATION TO OUTING

- Submit a tour and activity plan if required by the local council.
- Establish details for travel to destination.

ACTIVITIES

- Option 1: Visit a museum that shows the progression of gadgets and gizmos over time.
- Option 2: Visit a hardware store to see what makes up gadgets and gizmos.
- Option 3: Visit a community member who has an interest in historical artifacts and can show the Lion Scouts antique gadgets and gizmos.

AFTER THE OUTING

- Give thank you notes to those who helped.
- Present Lions with a sticker to designate the completion of the Gadgets and Gizmos adventure.
- Have Lions put the sticker in their adventure book.

TRANSPORTATION HOME

- Follow details established during planning phase.