



## **The Musculoskeletal System**

### **SNAP, CRACKLE, OUCH!**

#### **Description**

Osteoarthritis (OA), is the most common form of arthritis and a leading cause of joint pain, stiffness, and disability in older adults. It occurs when the cartilage that cushions joints gradually wears down, leading to discomfort, instability, and reduced mobility. Its progression is influenced by factors such as aging, obesity, past injuries, and genetics. As the cartilage wears down, bones begin to rub together, making movement painful and restricting daily activities. This simulation will give you a firsthand experience of the stiffness, discomfort, and limited motion that individuals with OA face daily.

#### **Materials**

- 1 Roll of Tape
- 1 Can of Dried Beans (Alternatives: kernels, pebbles)
- 1 Pair of Shoes
- 1 Chair
- 1 Pill bottle (alternatives: jar, lidded bottle)
- 1 Piece of Paper (alternatives: computer with keyboard)
- 1 Pen (alternatives: pencil, marker, crayon)

#### **Procedure**

1. While seated on a chair, add the beans or any alternatives inside your shoes.
2. Next, get up from the chair.
3. Then, proceed to walk around.
4. Next, grab a roll of tape and tape all the joints of your fingers, preventing them from bending.
5. With the taped joints try opening any pill bottle or screw top lid.
6. As a step further, try removing and sorting the pills in the bottle.
7. With the taped fingers, grab a piece of paper and a pencil.
8. Try to write a letter to a loved one.
9. Lastly, with both the beans in your shoes and taped fingers, try grabbing something from the top shelf or surface in your house.

**Reflection Questions**

1. How did you feel while completing any of the tasks? Did you feel frustrated? If yes, why do you think you felt that way?
2. Did you find yourself adapting movements to compensate for discomfort or stiffness?
3. If you had to live with this condition permanently, how do you think it would affect your independence and confidence?
4. How has this experience changed your perspective on people living with osteoarthritis?