

Station 1:
BLUNT TRAUMA
MATERIALS

At this station you should find the following materials:

- 1 Murder weapon
- 1 Tape measure
- 1 Ruler (12 in)
- 1 600mL beaker
- 1 Centigram balance

If any of these materials are missing, IMMEDIATELY notify the Event Supervisor

TASK

Uh oh, Arnold's back at it! Using any or all of the materials at this station you are to determine the density of the solid murder weapon dropped by Arnold Schwarzenegger at the scene of the crime.

Show all work.

Return all materials to the orientation you found them in.

Station 2:
DON'T BUMP YOUR HEAD
MATERIALS

At this station you should find the following materials:

- 1 Meter stick
- 1 Protractor
- 1 Ruler (12 in)

If any of these materials are missing or damaged in any way, IMMEDIATELY notify the Event Supervisor

TASK

Using any or all of the materials at this station you are to determine the height of the door. Could the 7'6" Yao Ming have walked into the room and stolen the money if he had arthritis? You must remain at least 5 meters away from the door (5 m line marked by tape).

Show all work.

Return all materials to the orientation you found them in.

Station 3: MY! WHAT BIG FEET YOU HAVE MATERIALS

At this station you should find the following materials:

- 1 Ruler (12 in)
- 1 Protractor
- 1 Tape measure
- 2 Sheets of tracing paper

If any of these materials are missing or damaged in any way, IMMEDIATELY notify the Event Supervisor

TASK

Using any or all of the materials at this station you are to determine the surface area of the shoes worn by the Big Bad Wolf.

IF YOU MARK THE IMAGE OF THE SHOEPRINTS YOU WILL BE DISQUALIFIED

Show all work.

Return all materials to the orientation you found them in.

Station 3:



**Station 4:
SLOPPY ESCAPE**

MATERIALS

At this station you should find the following materials:

1 Rolling object labeled “Danny”

1 Ramp

1 Meter stick

1 Tape measure

1 Stopwatch

1 Centigram balance

If any of these materials are missing, IMMEDIATELY notify the Event Supervisor

TASK

During his daring getaway, Danny Ocean loses control of his vehicle as it rolls down a ramp and down a 1m length road before colliding with Howie Day’s parked Smartcar (which weighs half as much as Danny’s vehicle). Assume the collision is perfectly inelastic (that is, the vehicles stick together after the collision).

Using any or all of the materials at this station, you are to find the speed of the two cars immediately after collision.

Show all work.

Return all materials to the orientation you found them in.

Station 5: THE ALUMINUM GUN MATERIALS

At this station you should find the following materials:

1 Aluminum strip / bar (labeled “Aluminum”)

- 1 Other metal strip / bar (labeled "X")
- 2 400mL beakers
- 1 Hotplate
- 2 Thermometers
- 1 Centigram balance
- 1 Ruler (12 in)

If any of these materials are missing, IMMEDIATELY notify the Event Supervisor

TASK

A shortage of gold has forced James Bond to resort to using aluminum bullets for his guns. At the scene of the crime, some bullets made out of material X were found embedded in the concrete. Could James Bond have been the shooter?

Show all work.

Return all materials to the orientation you found them in and wipe up any water in the area.