KINAWA MIDDLE SCHOOL
TECHNOLOGY EDUCATION

SCATTERING OF LIGHT
LASER ACTIVITY # 1

MATERIALS AND EQUIPMENT:

Metrologic Laser	Can of Air Freshener
Jar of Air	Jar of Distilled Water
Jar of Tap Water	Jar of Salt Water
Jar of Incense Smoke	Ice Cube
Assorted Prisims	White and Black Paper

INTRODUCTION:

Objects are visible because they reflect or scatter light to the eyes. Laser light is not visible to the eye unless, like ordinary light, there is something to to scatter it or reflect it to the eye. To illustrate this you will conduct the following activities with the laser and record your observations on the attached sheet.

PROCEDURE:

1. Set up the laser on the counter so the beam will show on wall.
2. Spray a *SHORT* burst of air freshener in the beam of the laser making sure that it does not touch any equipment or supplies. Record your observations.
3. Place the jar of air in the laser beam and record your observation of the contents of the jar and the image on the wall.
4. Place the jar of distilled water in the laser beam and record your observations of the jar and the image on the wall.
5. Continue placing objects in the laser beam and record your observations. Use the following items to place in the beam:

    a. Tap Water b. Salt Water c. Smoke

    d. Ice Cube e. Assorted Prisims

NOTE: Make sure that you record all your observations on the attached data sheet. Make sure you also answer the questions. This should be your individual work and words, not that of other members of your team.

Developed through a grant from the Michigan Department of Education - Vocational Technical Ed. Services

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LASER DATA SHEET # 1

ITEM	OBSERVATIONS IN CONTAINER	ON WALL
AIR FRESHENER		
AIR		
DISTILLED WATER		
TAP WATER		
SALT WATER		
INCENSE SMOKE		
ICE CUBE		
ASSORTED PRISIMS		

QUESTIONS:

1. **What color of light is the Metrologic laser?**

2. **Why does the laser beam become visible when solid particles come into the beam? Explain in detail !**

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