

Designing Environmental Solutions

Materials List

Chapter 2, Air Pollution Solutions

Engage Materials

For each student:

pens or pencils of different colors

For the demonstration:

1 candle with holder
safety matches
1 heat-resistant white tile
water for disposal of the match

Explore Materials

For each class of 30 students, teams of 3:

5 copies of Master 2-1, *Pollution Detector Template*, cut apart
1 roll of clear packing tape (48 mm wide)
10 pairs of scissors
10 hole punches
masking tape for positioning finished pollution detectors
string for hanging finished pollution detectors
5 copies of Master 2-2, *Pollutants*

Explain Materials

For teacher preparation:

water
vinegar
baking soda
pH paper (or a pH meter)

For each class of 30 students, teams of 3:

20 zip-top plastic sandwich bags
20 paper towels (plain white works best)
200 radish seeds
10 graduated cylinders (25 or 50 mL)
water
acid water (pH 3)
10 permanent markers
30 pairs of latex gloves (optional)

Elaborate Materials

For each team of 4 students:

1 copy of Master 2-3, *Technologies Related to Air Pollution*

Evaluate Materials

none