

Material List for Middle School Group

1 group= 4 participants

Lesson 1		
Consumables	Non Consumables	Items to be printed
Antiseptic mouthwash (1 large bottle)	Microscope (1 per group if possible)	Label Your Microscope worksheet (optional - 1 per participant)
Cotton swabs (2-3 per participant)	Slides (12-14 per group)	Microscope Lab - Microbes in Your Mouth instructions (1 per group)
Toothbrushes (1 per participant)	Coverslips or additional slides	
Toothpaste (for each participant)	Computer and internet access for groups	
Floss (for each participant)	Recording device for Public Service Announcement (if available, optional)	
Small paper cups (one per participant)		
Alcohol swabs to clean the microscope eyepiece		

Lesson 2		
Consumables	Non Consumables	Items to be printed
Paper or poster (for each participant)	Access to computers or library for participant research	Wanted Poster rubric (1 per group/participant)
Glo-germ (1 container)	Blacklight	Think-Pair-Share worksheet (1 per participant)
Colored pencils, markers, rulers, etc., for all participants or groups to complete their Wanted posters		

Lesson 3 (Continued on the following page)		
Consumables	Non Consumables	Items to be printed
Plain yogurt (at least 1 cup is necessary for making yogurt to use as a starter)	Thermometer (digital works best)	Microbes in Our Food Introduction and Lab Analysis worksheets (1 per participant)
Vanilla or other flavored yogurt to taste (optional - enough for each participant) Note: Yogurt for tasting can be any flavor. The starter yogurt needs to be plain yogurt.	Permanent marker (1 per group)	Microbes in Our Food Lab Procedure (1 per group)

Material List for Middle School Group Continued

Lesson 3: Continued		
Consumables	Non Consumables	Items to be printed
Plain yogurt (at least 1 cup is necessary for making yogurt to use as a starter)	Thermometer (digital works best)	Microbes in Our Food Introduction and Lab Analysis worksheets (1 per participant)
Vanilla or other flavored yogurt to taste (optional - enough for each participant) Note: Yogurt for tasting can be any flavor. The starter yogurt needs to be plain yogurt.	Permanent marker (1 per group)	Microbes in Our Food Lab Procedure (1 per group)
Styrofoam cups with lids (1 per group)	1 Hot plate	
Plastic spoons (1 per person for yogurt bar and 2 per group when making yogurt)	1 Large (2 qt. or larger) beaker or saucepan	
Quart sized sealable bags (1 per group)	1 oven mitt for holding sauce pan	
Plastic wrap (1 roll)	1 cooler or insulated container to insulate yogurt cultures	
Newspaper (any color works)		
Napkins (enough for all participants)		
Paper cups for yogurt tasting (1 per participant)		
Toppings for yogurt tasting (these can be provided by facilitator or participants)		
Whole milk (1 gallon)		
Powdered milk (1 box)		

Lesson 4 (Continued on the following page)		
Consumables	Non Consumables	Items to be printed
Sample of water from a local water source (pond, river stream) Note: Try to get a sample that looks to be "clear with nothing in it"	Empty clear jar (mason or baby food jars work well) (1 for the whole class, 1 per group)	Microbe Data Sheet (1 per participant)

Material List for Middle School Group Continued

Lesson 4: Continued		
Consumables	Non Consumables	Items to be printed
Slide cleaning materials to use after the lab if the slides will be reused: soap and water, glass cleaner, alcohol spray, or lens cleaner AND paper towels, tissues, or lint-free tissues	Hand lens (1 per group)	Microscope Lab Procedures (1 per group)
	Microscope (if available, 1 per group)	
	Microscope slides (4-5 per group)	
	Coverslips for microscope slides (one slip needed per slide). (optional; additional slides may be used in place of coverslips)	
	Pipette (dropper) (1 per group)	
	Optional: Water Testing kit can be used to expand discovery of the water sample	

Lesson 5		
Consumables	Non Consumables	Items to be printed
One petri dish with agar solution (4-inch size) per participant	Subject notebook/journal and pen/pencil (1 per participant)	Microbial Math worksheet (1 per participant)
Cotton swabs (1-2 per participant)	Permanent Marker (1 per group)	Participant Data Sheets A, A-1, and A-2 (1 per participant)
Tape	Hand lenses (1 per group)	Microbes All Around Us Lab Reflection (1 per participant)
Disinfectant	Plastic pipette (1 per group)	Parent letter (1 per participant)
Safety gloves (1 pair per participant)		
Alcohol swabs to clean the microscope eyepiece		
Poster board (1 per group)		
Bleach solution		

Material List for Middle School Group continued

Lesson 6		
Consumables	Non Consumables	Items to be printed
Coffee Filter (1 per participant)	Knife to peel any fruit as necessary	DNA Extraction Activity Participant Lab Sheet (1 per participant)
Bathroom cup (5 oz) (1 per participant)	Small test tube with lid (1 per participant)	Observation and Reflections handout (1 per participant)
Cup of warm water (tap water) (1 per participant)	Plastic Pipette (1 per participant)	
Piece of the selected item being tested (fruit or vegetable, 1 per participant, see lesson for options)	Hand lens (1 per participant)	
Plastic spoon (1 per participant)	Bottle of 91% rubbing alcohol (kept in freezer) (1 large container)	
Toothpick (1 per participant)	Colored pencils (for each group)	
Quart sized sealable plastic bag (1 per participant - consider having extra plastic bags in case any group members break their bags during the experiment)	Funnel (1 per group)	
Bottle of clear liquid dish detergent	Measuring spoon set (1 per group)	
Container of salt	Test tube brushes (for the class)	
8oz cup full of ice and water		

Grab and Go 1		
Consumables	Non Consumables	Items to be printed
Small cup of water (1 per group)	Microscope (one per group, or one for the class if more are unavailable)	Microscope Practice Lab instructions (1 per group)
Paper towels or napkins to use to absorb water	Magnifying glass (1 per group)	Label Your Microscope worksheet (1 per participant)
Alcohol swabs to clean the eyepiece between each participant	Slides (4-12 per group)	
	Coverslips (or additional slides to act as coverslips)	
	Dropper (1 per group)	

Material List for Middle School Group Continued

Grab and Go 2		
Consumables	Non Consumables	Items to be printed
Poster board (1 per group)	Internet access for each group	
Markers, colored pencils, and rulers for each group		

Grab and Go 3		
Consumables	Non Consumables	Items to be printed
Glo-Germ Gel or powder	1-2 black lights depending on size of group (1 black light for 15 people works well)	
1 bottle of hand sanitizer		
1 bottle of hand soap		
Water source		