

# HOW TO DO A WASTE AUDIT

## Materials:



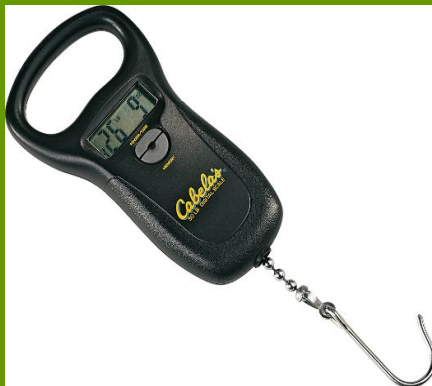
One day of garbage



Nitrile gloves (S,M,L,XL)



10' x 10' tarp & dustpan



One day of garbage



Transparent bags & bucket



Clipboard & Paper



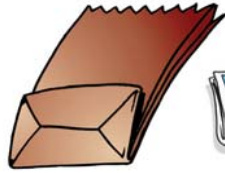
Recycling



Trash



Paper



Paper Towels



Metal



Non-recyclable

Plastic



Plastic



Compostable



Food



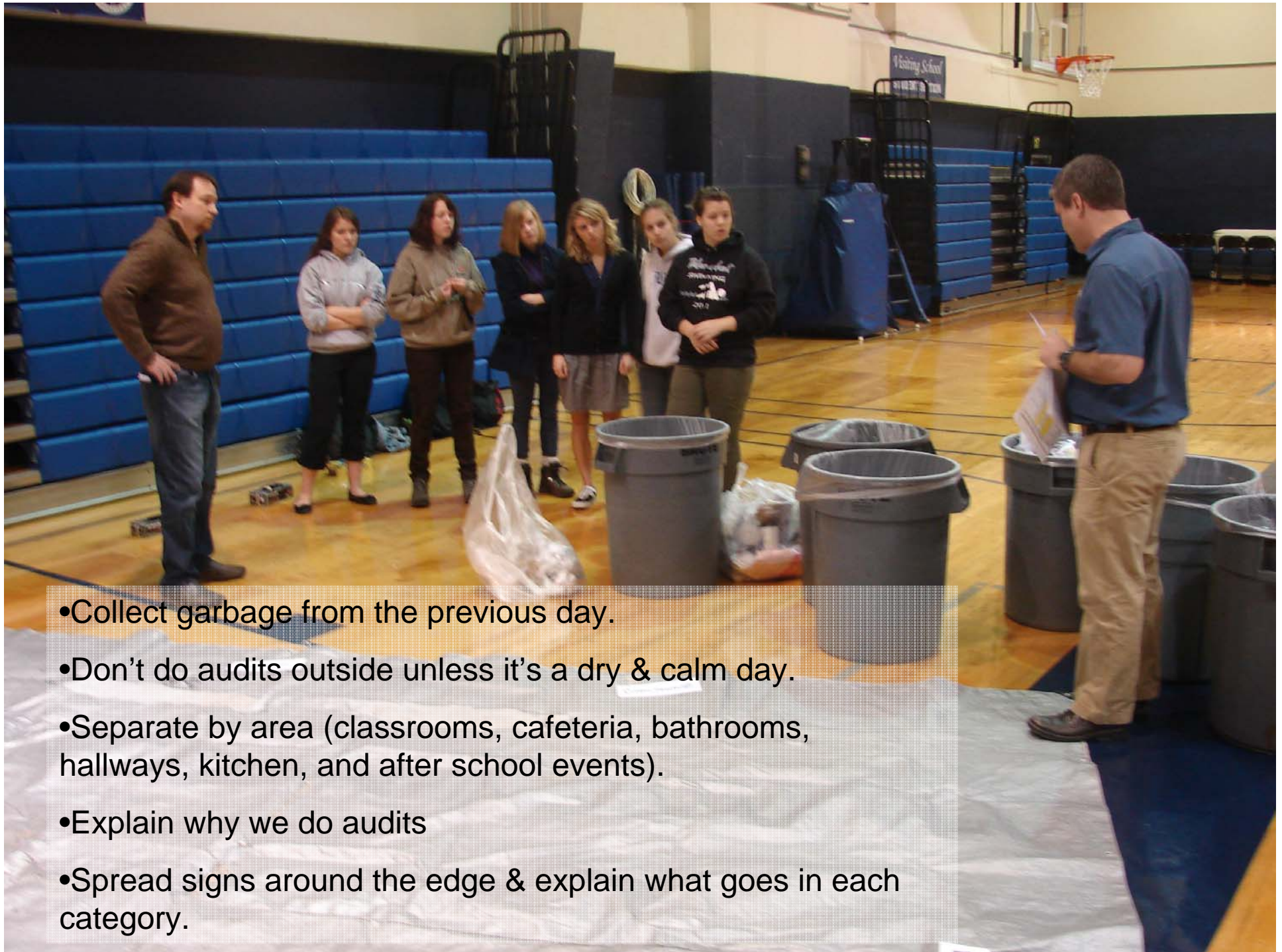
Food



Reuse



Milk Cartons



- Collect garbage from the previous day.
- Don't do audits outside unless it's a dry & calm day.
- Separate by area (classrooms, cafeteria, bathrooms, hallways, kitchen, and after school events).
- Explain why we do audits
- Spread signs around the edge & explain what goes in each category.



- Take garbage from one of the sorted categories (i.e. classroom garbage) and put in center of tarp.
- Only measure volume of bathroom waste & pull out non-food items from cafeteria waste.

- Once you have sorted everything from one particular area, go around & make any corrections.
- Ask the students to make observations.



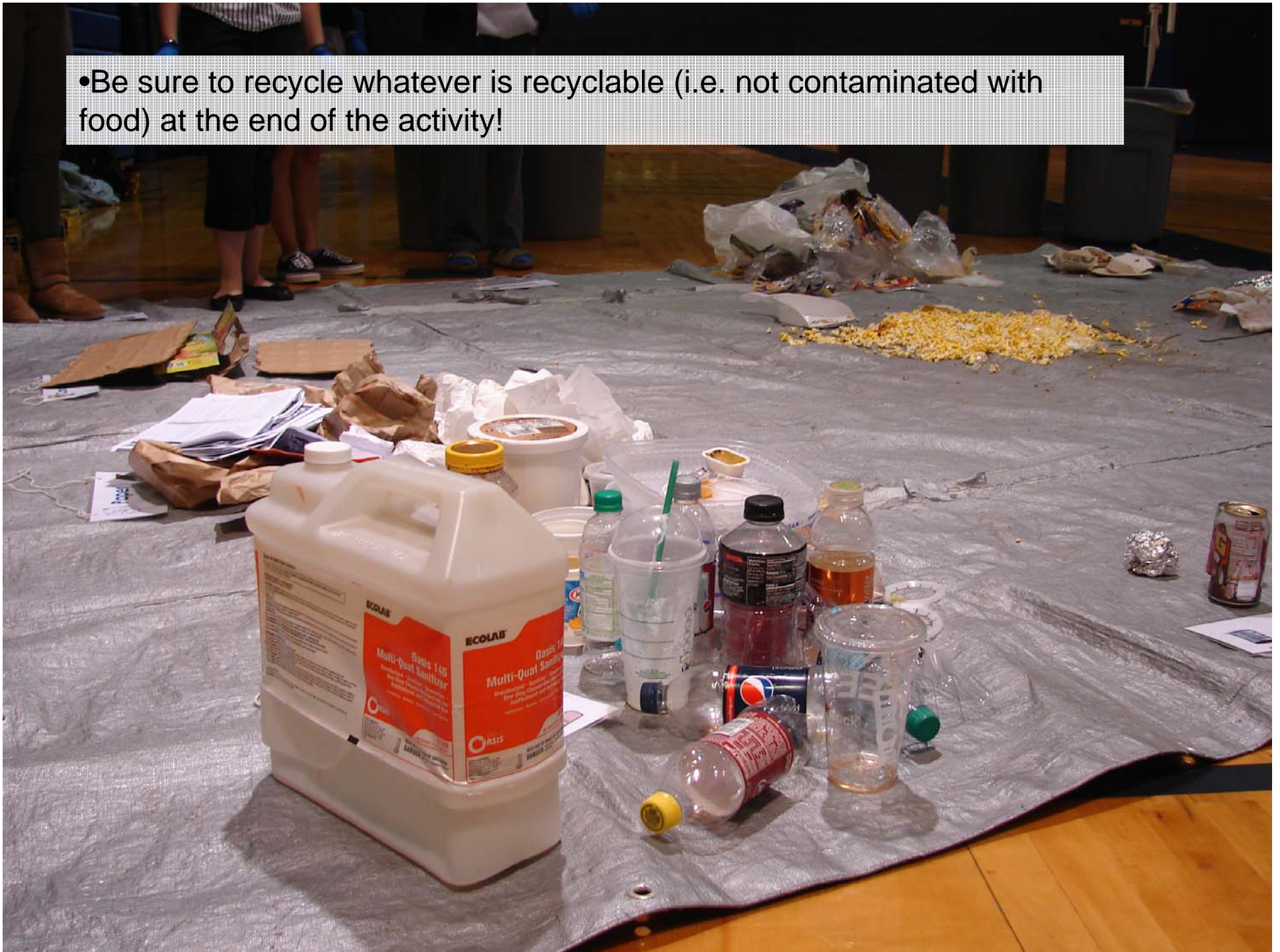


- Another way to do it is to use buckets to collect the material.
- Repeat the previous steps for each area until you have finished sorting all of the garbage (except bathrooms).



- Next have the students weigh each bag of garbage. Fish scales work well, but another (less accurate) method is a bathroom scale.
- Ask students to estimate the volume. Have them think of a milk jug or use a 5 gallon bucket.
- Record the weights & volumes separately for each area that you collect garbage.

- Be sure to recycle whatever is recyclable (i.e. not contaminated with food) at the end of the activity!





**Classrooms, cafeteria & hallway garbage**

		Weight (lbs)	Weight (oz)	% of Total Weight	Approx. Volume (gallons)	% of Total Volume	Sub-Total % (Weight)
<b>Recyclables in Garbage:</b>	Mixed Paper (mail, magazines, newspaper, greyboard)		13	4.86%	4	11.35%	28.02%
	Metals		3	1.12%	0.25	0.71%	
	Rigid Plastic (containers)	3	1	18.31%	6.5	18.44%	
	Cardboard		10	3.74%	1.5	4.26%	
<b>Special Recycling:</b>	Paper Napkins	1	3	7.10%	4	11.35%	13.08%
	Glass			0.00%		0.00%	
	Film Plastic (bags, wrap)	1	0	5.98%	6	17.02%	
	Books			0.00%		0.00%	
	Compostable food scraps	5	3	31.01%	3	8.51%	
<b>TOTAL RECYCLABLES &amp; COMPOSTABLES</b>		<b>12.06</b>		<b>84.43%</b>	<b>25.25</b>	<b>71.63%</b>	
<b>Garbage</b>	Garbage: Includes paper towels from bathroom, milk and juice cartons, candy wrappers, straws, etc.	4	8	26.90%	10	28.37%	26.90%
	<b>TOTAL GENERATED (recyclables + garbage)</b>	<b>16.73</b>		<b>100.00%</b>	<b>35.25</b>	<b>100.00%</b>	

Materials in Garbage:	% of Total Weight
Mixed Paper (mail, magazines, newspaper, greyboard)	4.86%
Metals	1.12%
Rigid Plastic (containers)	18.31%
Cardboard	3.74%
Paper Napkins	7.10%
Glass	0.00%
Film Plastic (bags, wrap)	5.98%
Books	0.00%
Compostable food scraps	31.01%
Garbage (unrecyclable)	26.90%

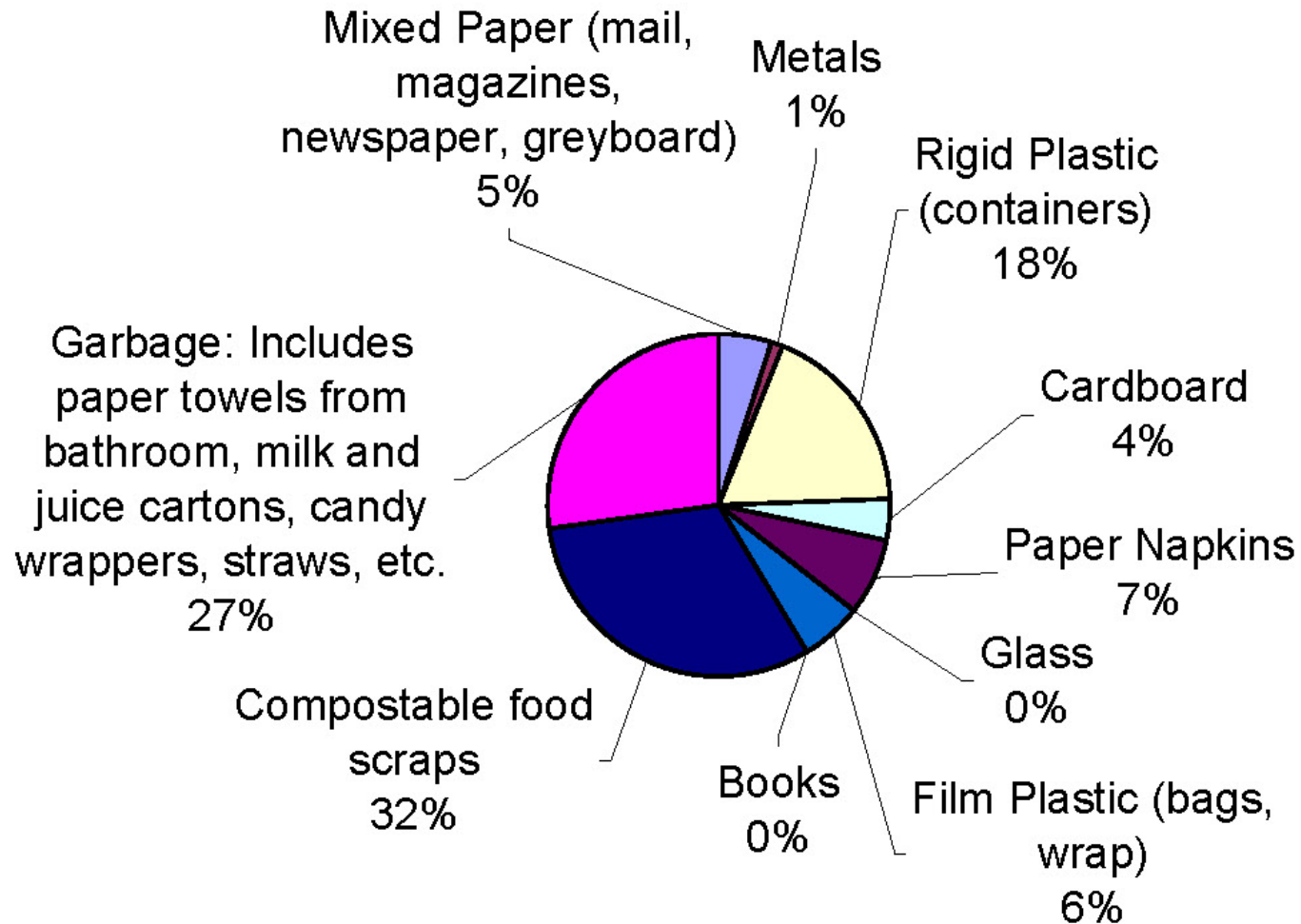
School & District: Blanchet High School Hauler: \_\_\_\_\_  
 Date: 2/10/11 Coordinator: Dave Mucken  
 Tel.: \_\_\_\_\_ Email: \_\_\_\_\_  
 Principal: \_\_\_\_\_ # of Students: \_\_\_\_\_  
 Lead Custodian: \_\_\_\_\_  
 How many bags of waste were collected and where did it come from? Mention any special circumstances that may have affected the results:

Materials in Garbage	% of Total Volume
Mixed Paper (mail, magazines, newspaper, greyboard)	11.35%
Metals	0.71%
Rigid Plastic (containers)	18.44%
Cardboard	4.26%
Paper Napkins	11.35%
Glass	0.00%
Film Plastic (bags, wrap)	17.02%
Books	0.00%
Compostable food scraps	8.51%
Garbage (unrecyclable)	28.37%

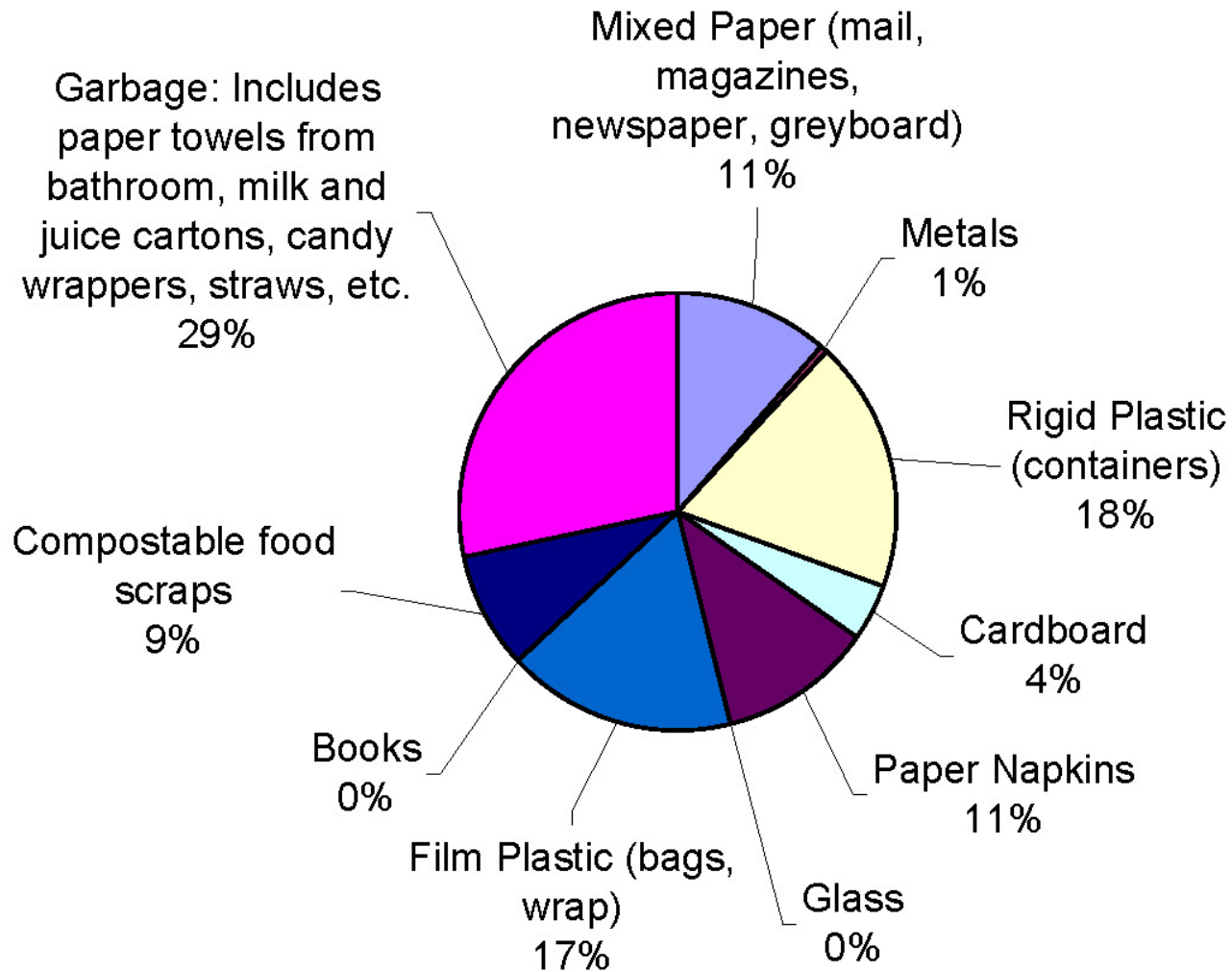
**Garbage:** Size of container: \_\_\_\_\_ # of containers: \_\_\_\_\_  
 # of times dumped/week: \_\_\_\_\_ Cost/dump: \_\_\_\_\_  
**Recycling:** Size of container: \_\_\_\_\_ # of containers: \_\_\_\_\_  
 # of times dumped/week: \_\_\_\_\_  
**Cardboard:** Size of container: \_\_\_\_\_ # of containers: \_\_\_\_\_  
 # of times dumped/week: \_\_\_\_\_  
**Yard Debris:** Size of container: \_\_\_\_\_ # of containers: \_\_\_\_\_  
 # of times dumped/week: \_\_\_\_\_  
**Directions:** 1) Fill in the yellow boxes with weights and volumes. 2) Enter the information into the spreadsheet 3) Adjust labels so that the titles align (in the two green worksheet) bottom of this spreadsheet. Last updated 8/6/09

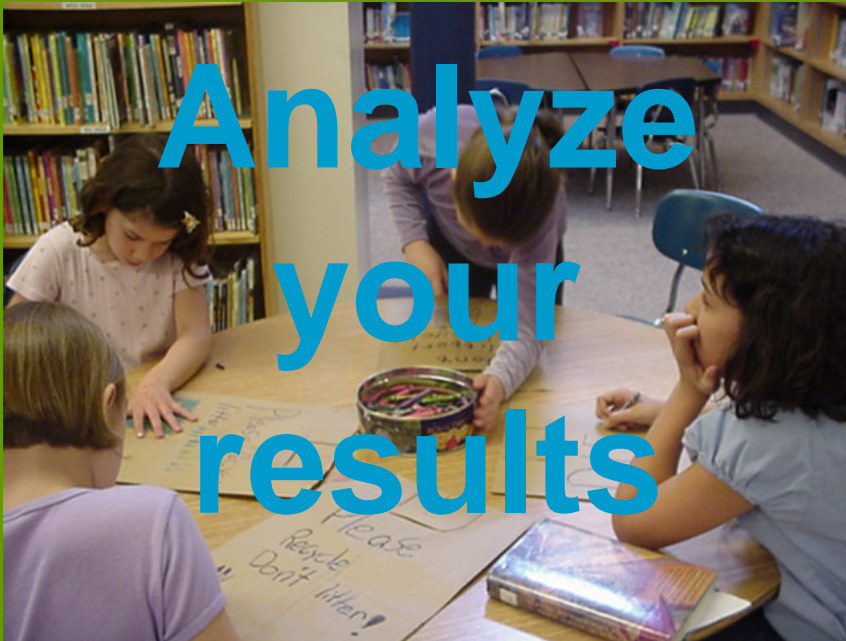
- Enter in the weights and volumes of the various categories of materials.
- Use a separate form for each area that you audit.
- The form is customizable.
- It is not a requirement that you use this format.

## Weight of Waste



## Volume of Waste





Analyze  
your  
results



Create a  
plan of  
action



Share your  
results &  
plan



Take  
action

# Questions???



**Please email me if you would like me to send you...**

- The “How to do a Waste Audit” document
- The “Waste Audit” spreadsheet
- This presentation
- Any other tools or calculators from the flash drive demo



Bailey Payne  
Marion County Public Works  
Environmental Services  
(503) 588-5169 x 5991  
[bpayne@co.marion.or.us](mailto:bpayne@co.marion.or.us)