

SEA SPLASH NOT TRASH

Make a **pie chart** showing the percentages of the top 10 items of debris found in the oceans. Pie charts are an easy way to visualize percentages. They are useful for analyzing statistics and data. An effective pie chart is easy to read and tells a story at a glance

Top 10 Marine Debris Items

Item	20 Year Total
Cigarettes Butts	12,848,255
Caps/Lids	4,186,593
Cups/Plates/Utensils	3,575,209
Bags	3,346,666
Food Wrappers and Containers	3,318,729
Bottles (Glass)	2,329,142
Cans	2,293,559
Bottles (Plastic)	1,965,210
Straws/Stirrers	1,960,122
Rope	925,301
Total	36,748,786

Source: www.oceanconservancy.org

How to make a pie chart

Step 1 - **Organize your information.** First gather your data/info from the table above.

Step 2 - **Identify the denominator.** All of the numbers added together (total) give you the denominator.

Step 3 - **Identify the numerators.** Each item of the data is a numerator.

Step 4 - **Divide the numerator by the denominator.** Convert your fractions to a decimal.

Step 5 - **Find the angle.** Multiply the decimal by 360 (degrees in a circle). Round off to 1 decimal place.

Step 6 - **Use a maths compass to draw a circle.** Hint: make a dot with the compass to find the centre.

Step 7 - **Place your protractor on the circle.** Place your protractor on the circle so that the 90 degrees mark is directly above the center of the circle.

Step 8 - **Draw the radius.** Start in the exact center of the circle and draw a radius to the outside of it.

Step 9 - **Draw each section.** Draw the sections by using the angles you calculated in step five. Each time you add a section the radius changes to the line you just drew.

eg. $12\,848\,255 \div 36\,748\,786 = 0.3496239$

$0.3496239 \times 360 = 125.8646$

Round off to 1 decimal place = 125.9

- ❖ A pie chart showing these results is available.
Go back to the main page.

