



**EXPLORING OIL EXTRACTION
WORKSHEET**

Name: _____

Data and Calculations for Oil Extraction Experiment

Type of nut or seed used: _____

Press setup

	Mass of empty container (g)	Mass of container and nuts/seeds (g)	Calculate mass of only nuts/seeds (g)
Plastic container and nuts/seeds			
Large glass beaker and meal			

Filter setup

	Mass of empty container/filter (g)	Mass of container/filter and oil/meal (g)	Calculate mass of only oil/meal (g)
Small plastic beaker and oil			
Filter and meal			

Keep Going →



Calculations

Mass of meal (g)	Mass of oil (g)	Mass of nuts/seeds (g)
Mm	Mo	Mt
Percent meal (%)	Percent oil (%)	Percent error (%)
$\%meal = [Mm / (Mm + Mo)] * 100$	$\%oil = [Mo / (Mm + Mo)] * 100$	$\%error = (Mm + Mo) / Mt * 100$

Calculations for Oil Extractor

1. Calculate Amount of Meal

Amount of Meal = Final Weight (Container + Meal) + Final Weight (Coffee Filter + Meal)

2. Calculate Amount of Oil

Amount of Oil = Final Weight (Beaker + Oil)

3. Calculate Amount of Nuts

Amount of Nuts = Final Weight (dixie cup + Nuts)

4. Percent Oil

Percent Oil = (Amount of Oil / (Amount of Meal + Amount of Oil)) x 100

5. Percent Meal

Percent Meal = (Amount of Meal / (Amount of Meal + Amount of Oil)) x 100

6. Percent Error

Percent Error = ((Amount of Oil + Amount of Meal) / (Amount of Nuts)) x 100