WHAT IS FOOD MADE OF?

The food we eat contains many different things - grain, pulses, vegetables, ghee, oil, meat etc. Do all these different things have something in common? How can you classify these types of foods? How do you know what kinds of foods they are and what they are made of?

Try and find out by doing a few experiments.
Collect the items listed in the Table. Place all the solid things separately on a plate and place liquids in separate containers.

Copy the Table in your notebook and predict whether each type of food contains fat, starch and protein. Then do the experiment and fill in your observations.

No.	Item	Fat		Starch		Protein	
		predict	test	predict	test	predict	test
1.	Boiled rice						
2.	Water of cooked rice						
3.	Uncooked rice						
4.	Atta						
5.	Maida						
6.	Potato						
7.	Peanut						
8.	Dal						
9.	Ghee						
10.	Milk						
11.	A vegetable						
12.	A fruit						

Experiment-1: TEST FOR FAT
Take a bit of the substance you want to test and rub it lightly on a piece of paper.
If the paper turns transparent, the substance contains **fat.**
[The paper also turns transparent if you rub kerosene oil, diesel or candle wax on it. But, remember, these are not edible things. They do not contain fat.]

Experiment-2: TEST FOR STARCH
Put a few drops of iodine on the substance you want to test. If the substance turns dark blue or black, it contains **starch**.

Experiment-3: TEST FOR PROTEIN
Put 10 drops of any liquid you wish to test in a clean test tube. If you wish to test a solid, grind it to a powder and put a little in the test tube. Add 10 drops of water to the powder and stir well.
Add 2 drops of copper sulphate solution (2%) and 10 drops of caustic soda (10%) to the test tube and shake well.
If the solution turns violet or purple, it contains **protein**.

Test the various food items separately for fat, protein and starch. If fat, protein or starch are present in the substance, then write "yes" in the respective column in the table. If they are not present then enter "no" in the respective column.
Note: Is it easy to answer Yes or No, or is there some uncertainty? Is it possible to tell whether one item has more or less fat, starch, or protein?