



BLOOD SPATTER

Fake Blood Recipes

Teacher Background Information

The following recipes have been collected from a variety of sources. The aim is to make fake blood that has similar viscosity to real blood.

A number of the recipes use corn syrup (a popular US brand is Karo that can be bought at specialty stores) however corn syrup can be substituted with golden syrup.

Fake Blood Recipe 1

You will need:

- 175g cornflour
- 75mL water
- 175mL golden syrup
- 3 teaspoons red food colouring
- 1 teaspoon green food colouring
- container for mixing
- mixing implement (spoon, stick etc)

Method

- Mix corn flour and water together in a bowl or jug.
- Add the golden syrup.
- Add the red and green food colouring. You will need to play around with the quantities of red and green food colouring. Adding more red food colouring will make the blood more pinky and adding more green will give the blood a more brownish colour.

http://www.planet-science.com/outthere/index.html?page=/outthere/planet_goth/tricks_02.html

NB:

Blood appears red because when white light falls on it, it absorbs all the colours in sunlight except red, which it reflects. Red food colouring is much more of a pinky colour than blood so you need to add green to remove the pink tinge.

Green food colouring absorbs all colours apart from green, so when mixed into the red colouring it absorbs some of the red light that was previously been reflected. This makes the blood mixture darker and the colour 'dirtier'. Instead of a bright clear red, it becomes a sludgy brown. By adding only a little bit of green to the red food colouring you should get just a brown tinge to the blood.

Fake Blood Recipe 2

You will need:

- 160mL corn syrup
- 80mL water
- 44g of cornstarch
- 15mL-25 mL red food colouring
- 2-3 drops green food colouring
- container for mixing
- mixing implement (spoon, stick etc)

Method

- Mix the cornstarch thoroughly with the water.
- Add the corn syrup. Mix well.
- Add red food coloring to the mixture using only 3 teaspoons at first.
- Then add a couple of drops of green food coloring to take the "pink" edge off the red coloring. If the mixture is too light, add one or two teaspoons more of red food coloring. Add an extra drop of green food coloring if the mixture gets too pink again.

*This makes about 1 cup of simulated blood.

http://www.cctt.org/cctt/cgli/9062_9246.as

Fake Blood Recipe 3

You will need:

- 100mL corn syrup
- 25mL water
- 10 drops red food colouring
- container for mixing
- mixing implement (spoon, stick etc)

Method

- Combine the corn syrup thoroughly with the water.
- Mix well.
- Add red food colouring drop by drop.

Oller, A.R. 2006 Medium velocity spatter creation by mousetraps in a forensic science laboratory. The American Biology Teacher, 68(3): 159-161.



BLOOD SPATTER

Fake Blood Recipes

Fake Blood Recipe 4

You will need:

- 2 fl ozs ivory dish washing liquid
- red food colouring.
- container for mixing
- mixing implement (spoon, stick etc)

Method

- Pour a couple of ounces of the ivory liquid into a bowl.
- Add food coloring and mix thoroughly.

www.meti.com/downloads/rec_dis.pdf

Fake Blood Recipe 5

You will need:

- canola oil
- red coloured sugar crystals – purchase from the cake decorating section
- measuring cyclinder
- 150mL beaker
- mortar and pestle

Method

- Grind the sugar crystals into a fine powder in the mortar & pestle.
- Measure 40mL of the ground sugar crystals into a dry measuring cylinder.
- Pour the sugar powder into a beaker.
- Add oil to the beaker containing the sugar powder, while stirring, until the volume reaches 100mL.

<http://www.MybloodYourblood.org/>

Fake Blood Recipe 6

You will need:

- 16 oz. White corn syrup (Karo syrup - this is a US product, but adding golden syrup does the job just as well, alternatively just mix sugar and water and reduce on the stove until it becomes syrupy)
- 1oz. red food colouring
- 1oz. washing detergent
- 1oz. water
- 2-3 drops blue food colouring
- condensed milk
- container for mixing

- Mixing implement (spoon, stick etc)

Method:

- Mix together the corn syrup with the food colouring and water.
- Add some condensed milk to makes it less transparent and more like real blood.
- Adding Liquid Washing Detergent to any recipe will ensure that the blood washes out easily.

Fake Blood Recipe 7

You will need:

- 2 teaspoons arrowroot powder
- red powder paint
- coffee granules
- water
- mixing implement (spoon, stick etc)
- beaker
- bunsen burner, tripod, gauze mat (or other heating device)

Method:

- Add 2 teaspoons of arrowroot powder to heating water.
- Add a small amount of non-toxic paint powder (red) and stir.
- Prepare the coffee concentrate by adding a small amount of water to coffee granules.
- Add a tiny amount of the coffee concentrate to the mixture.

<http://www.exposure.co.uk/eejit/blood/blood.html>

Fake Blood Recipe 8



BLOOD SPATTER

Fake Blood Recipes

You will need:

- 1/2 cup water
- 1 tablespoon cocoa powder
- 3 or 4 tablespoon corn syrup
- 1/2 to 1 teaspoon red food coloring
- 2 drops yellow or green food coloring (optional)
- container for mixing
- mixing implement (spoon, stick etc)
- tissues

Method:

- Mix the cocoa powder thoroughly into the water before adding the other ingredients - it may help to use warm water.
- After adding the rest, blend the concoction well, and then wait for it to settle a bit.
- Either skim the bubbles & chocolate scum off the top with the edge of a tissue, or pour the mixture into another container. The longer it sits, the more the cocoa tends to settle to the bottom, which oddly mimics the effect of real blood separating.
- If you splatter this mixture onto cloth, it makes neat two-part marks that dry into pretty convincing bloodstains.
- If you let it run from a victim's mouth and then let it dry, the blood darkens and cakes to the skin in much the same way real blood does.

For blood typing experiments

Recipe No.1

Blood group A = 0.5M sodium chloride (2.9 g/100mL water) + red food dye

Blood group B = 0.1M barium nitrate 92.6g/100mL water) + red food dye

Blood group AB = mix equal amounts of the above 2 reagents + red food dye

Blood group O = water + red food dye

Antisera A = 0.1M silver nitrate (1.7g/100mL water)

Antisera B = 5% sodium silicate (5.0g/100mL water)

Use only enough food dye to obtain desired colour.

Keep all samples in sealed airtight containers after preparation and before use.

A "+" test results if solids form when "antisera" is mixed

with "blood"

A "-" test results when no solids are formed by the mixture.

Recipe No.2

Blood Group A = HCl

Blood Group B = H₂SO₄

Blood Group AB = HCl + H₂SO₄

Blood Group O = water

All solutions are coloured with red food dye.

Antisera

A = AgNO₃ solution

B = BaCl₂ solution

Concentrations of solutions are not critical (all <1M)

<http://www.rtg.wa.edu.au/solution/probsoln.htm>

Blood as a mixture

You will need:



BLOOD SPATTER

Fake Blood Recipes

- Red sequins (red blood cells) - enough to fill 40mL of a 100mL measuring cylinder
- Glass or plastic beads (white blood cells, platelets) - the ratio is 1000 rbc's for every wbc and 100 platelets – estimate rather than count!
- 100mL water
- yellow food colouring
- cola
- clear plastic cup
- measuring cylinder

Method:

- Create the plasma by adding a few drops of yellow food dye and cola to water to make 100mL in the plastic cup.
- Add the red sequins and beads to the cup and mix all parts.
- Pour the mixture into the measuring cylinder.
- As the mixture settles the “cellular” components appear to be suspended in the plasma.

<http://www.MyBloodYourBlood.org>

