

Blood Spatter

In this activity, you will learn about different types of blood spatter patterns, and how blood spatter is analyzed by police to be used as evidence when solving crimes. Get ready to get a little messy!

You will need:

- Rubber or latex gloves, and old clothes in case of spilling
- Red food colouring
- Corn syrup or corn flour
- 1 large mixing bowl or bucket.
- 1 large painting drop sheet, or old bed sheets.
- Various kitchen items, such as: spatula, rolling pins, rubber mallet, sponges, and spoons

Background Intel

- Blood spatter can be a very important piece of evidence for police when they investigating a crime scene where blood is found. When examining patterns and shapes of blood spatter, investigators can determine how the blood got to an area, and what object was used to put it there. The following are the five main types of blood spatter patterns that are found:



Passive Drip



High Velocity



Wipe/Swipe



Transfer



Arterial Spray

Activity – DIY blood and spatter analysis

1. The first step is to make some fake blood! With gloves on, get a parent or guardian to help you mix a few drops of red food colouring and a cup of water in a large mixing bowl. Add your corn syrup in small amounts until you achieve a thick consistency! If you think that your fake blood is too thick, add more water in small amounts.

Note: If you do not have corn syrup at home, mix small amounts of flour or cocoa powder into water and food colouring until you reach your desired consistency!



2. The next step is to set up a fake crime scene. Take a large sheet or cloth (an old disposable bed sheet or paint drop cloth will work best). Secure the sheet to a wall allowing an excess fabric to drape onto the floor.
3. This activity is a fun yet messy experiment, and red food colouring can stain! Wear clothes that can get dirty and try to set up your crime scene in the garage, outside, or in a location that is easy to clean up.
4. Now that you have your crime scene set up and your blood has been created, it is time to practice some blood spatter techniques and patterns! Carefully dip your hands (with gloves on) or kitchen items into your fake blood, and try different techniques for transferring the blood onto your crime scene. Try flicking the objects, wiping your hands, or smearing the objects!

Activity- Blood spatter challenge

1. See if you can use your hands or kitchen items to recreate the five main types of blood spatter patterns, shown above in the Background Intel.
2. Try taking a large sponge, place it in front of your crime scene sheet and pour some fake blood onto it. Try to strike the sponge using household items, as shown below, and observe the spatter patterns on your sheet. Using this technique, do different items make different patterns?



Where to learn more!

If you would like to learn more about blood spatter and how it is analyzed by investigators, check out the video link below!

- A forensic expert explains about blood spatter analysis:
<https://www.youtube.com/watch?v=0jltioeaEyY>