

Ch 9 review

**These are the 8 different blood types
that a human could have.**

- **What are A+, A-, B+, B-, AB+, AB-, O+, O-?**

This is the definition of agglutination.

- **What is when blood cells clump together do to an immune response?**

A person that is A- has these antibodies.

- **What are anti-B and anti-Rh?**

A person that is bloodtype B- can receive these bloodtypes in a transfusion.

- **What are B- and O-?**

In order to determine if a person is type A, this is added to the “A” well in the blood typing tray.

- **What is anti-A serum?**

**This is the shape a blood drop takes while
in flight through the air.**

- **What is a sphere?**

This is the percentage of blood lost from the body that would cause death.

- **What is 40%?**

The average human has this many liters of blood in their body.

- **What is 5-6 liters in males and 4-5 liters in females?**

**These are the four components of
blood.**

- **Bones!**

**This is the property of blood
that causes it to contract into a
sphere when in flight.**

- What is surface tension?

**This is the definition of a passive
blood stain.**

- **What is drops created or formed by the
force of gravity acting alone?**

This is the definition of a transfer blood stain.

- **What is a blood stain created when a wet, bloody surface comes in contact with a secondary surface?**

These are two examples of types of transfer stains.

- **What are swipes and wipes?**

This is the definition of a projected blood stain.

- **What is a blood stain created when an exposed blood source is subjected to an action or force, greater than the force of gravity?**

**These are two examples of
projected blood stains.**

- **What are Arterial Spurt / Gush, Cast-Off or Impact Spatter?**

These are the names of the three types of impact spatter.

- **What are high velocity, medium velocity and low velocity?**

This is the cause of medium velocity blood spatter.

- **What is some form of impact from a hand or hand-held object?**

**This is the cause of high velocity
blood spatter.**

- **What is a gun shot?**

Medium velocity blood spatter usually falls in this size range.

- **What is 1-4 mm in diameter?**

This is the size of high velocity impact spatter.

- **What is less than 1 mm in diameter?**

When a droplet of blood strikes a surface at an angle perpendicular to that surface, this is the shape of the blood stain.

- What is a circle?**

As blood stains form at more and more acute angles, this is what happens to the shape of the blood stains.

- What is they become more elongated?**

**This the name for stains that spray off
and are disconnected from the main
stain.**

- **What are satellites?**

These are small parts of a blood stain that are still connected to the main blood stain but stick out from it, giving it the shape of a sun instead of a circle.

- **What are spines OR SATELLITES**

These are three characteristics of a blood stain which you can use to determine directionality.

- **What are satellites, the direction of the tail, the direction of any spines, where on the blood stain did the blood pool?**

This is the formula for AOI.

- **What is $\sin^{-1} (W/L)$?**

**This is the formula for
determining point of origin.**

- **What is $PO = \tan(AOI) * \text{distance}$?**

This is the definition of point of convergence.

- **What is the common point, on a 2 dimensional surface, over which the directionality of several bloodstains can be retraced?**

This is the point of origin of a blood stain that has a width of 2 cm and a length of 3 cm and is 20 cm from the point of convergence.

- **What is 22.4 cm?**

This is the angle of impact Δ of a blood drop that is 1.1 cm in width and 1.6 cm in length?

- **What is 46.6 degrees?**