**ADVENTURE ED. 1 FINAL EXAM STUDY GUIDE**

**ARCHERY**

A string bow is an effective piece of equipment that aids in practicing the steps for archery shooting.

In between shooting, the bows should be placed between the waiting line and the shooting line.

The best place to have the arrows during the archery class is in a floor quiver.

In an indoor archery range, a curtain is placed behind the targets to stop the arrows.

Archery Commands:

1 Whistle= Get Your Bows, 2 Whistles= Shoot Your Arrows, 3 Whistles= Get Your Arrows

When removing an arrow from the target, it is important to place one hand on the target above the arrow and the other around the arrow.

The best way to carry an arrow on the range is to walk with the hand around the shafts below the vanes.

The shooter aims at the target using his/her dominate eye.

The bow arm must be straight and the bowstring hand must be placed next to the cheek in order to achieve a proper draw on the bow.

The proper position of the string hand is to hook the string using three fingers that form the archers groove.

The bow hand knuckles should be set at 45 degrees.

The arrow must be placed onto the arrow rest with the index fletching point up towards the shooter.

On the follow-through, the bow hand should be kept still until the arrow hits the target.

When shooting, if the arrow strikes high then move the arrow point’s reference to the target lower.

The target is scored from 1 through 10 from the outside to the middle of the target.

If an arrow hits on the line between two point areas the higher point value is awarded.

The bow should not “dry fired” to prevent damage to the bow and bowstring.

All shooters should regard safety as the most important point on an archery range

**KAYAKING**

**Types of Kayaks:**

Kayaks are divided into three categories: whitewater, recreational, and sea kayaks. Whitewater boats are the shortest of the three categories and are designed to turn and roll efficiently in order to paddle in swift moving water. Recreational or downriver kayaks are designed to be put on a river at one point and paddled downstream to different point on a river. Generally, this type paddles easier in a straight line than a whitewater boat. The sea kayak is the longest of the kayak types and is designed for use on open water, such as lakes or oceans. This type is equipped with storage bulkheads for use on multi-day trips.

**The parts of the kayak** are:

**The bow** – front of the boat, **the cockpit** – sitting area, **the stern** – the rear of the boat, **the deck** – the areas between the cockpit and the front and rear of the boat and **the hull** – the bottom of the boat.

**Paddling equipment** includes:

The **kayak paddle** is a twin-bladed paddle to maneuver the kayak. The parts of the paddle: the **shaft** (area of paddle used to hold on to the paddle), the **face** or front of the blade and the **spine** or back of the paddle.

The **kayak skir**t is used to prevent water from entering the cockpit while paddling. The skirt consists of a waterproof **base** which attaches to the cockpit and a nylon **tunnel** which is worn around the chest.

The **Personal Floatation Device (PFD)** is usedto provide body buoyancy in the water.

The **helmet** is worn for head protection if the kayak is used in rocky or high surf areas. The helmet is made from ballistic plastic to withstand impact to the head.

**Paddling Technique**:

**General**: Grip the paddle in both hands with the hands shoulder width apart. The grip should be relaxed between your thumb and index fingers. To begin paddling, twist your body as you put the blade in the water and then untwist your body using your abdominal muscles. The boat will turn in the opposite direction of the side of the boat the paddle is placed into the water. For example: If you paddle on the right side of boat the boat will turn left. As with the grip, your hips should be in a relaxed sitting position to allow the boat to rock from side to side. Stiff hips will flip the boat.

**Forward Paddling Stroke**: Used to paddle the kayak in a forward motion. Begin by extending the paddle face towards one side of the bow of the boat and pulling back with the bottom hand while pushing with the top hand towards the bow of boat to finish the stroke.

**Backward Paddling Stroke**: Used to paddle the kayak in a backward motion. Begin by extending the paddle spine towards one side of the stern of the boat and pushing forward with the bottom hand while pulling with the top hand towards the stern of boat to finish the stroke.

**Turning**: The kayak can be turned by using a combination of forward and backward paddling strokes. The turn begins with either a forward stroke or backward stroke on one side of the boat followed by the opposite stroke on the other side of the boat. The strokes are repeated until the turn is executed.

**Bracing and Ferrying Strokes**: Bracing and ferrying strokes are primarily used in whitewater paddling. The **bracing stroke** is used to recover the boat if the boat tips to one side or the other. The face of the paddle is placed on the surface of the water to the side of the boat to which is tipping. The kayaker then leans on the face and lifts the hips to bring the boat back to a level position. The **ferrying stroke** is used to move the boat sideways in the water. The face of the paddle is turn sideways to the boat on the side in direction the boat needs to move. The face is then pulled towards the boat to move the boat in proper direction.

**Exit from Kayak**: In the event the kayak rolls or flips over, the kayaker should perform a wet exit from the boat. As the boat turns over, place your knees together and push out of the cockpit of the boat ensuring that you swim out to the side on the boat to avoid hitting your head on deck of the kayak. The kayaker needs to hold on to the kayak paddle to prevent the paddle from floating away and remain with the boat to facilitate self or partner rescue.

**Rescues**:

Rescues are classified either as self or partner rescues. In a **self-rescue**, the kayaker exits the boat and swims the boat and paddle to the shoreline or eddy area in order to get back in the boat. In a **partner rescue**, the kayaker uses the boat over boat technique to affect rescue. The boat over boat rescue involves using another kayaker to place the kayak which has turned over on top of the bow of their kayak with the deck side down. The victim helps to push their kayak onto the bow until the rescuer is able to empty the majority of the water out of the kayak. The kayak is then turned upright and place along the side of the other kayak and the rescuer holds the kayak to assist the victim to climb into the boat.

**ORIENTEERING**

The compass is basically a 360 degree protractor that has a needle that will point to magnetic north. By referring to the north (red) end of the **magnetic needle** and lining it up with the **orienting arrow** (shed) that is imprinted on the bottom inside of the **compass housing**, you can read the direction (or the number of degrees from north) that you are going to travel. The **direction of travel arrow** on the **base** of the compass points the way. The **orienting lines** located in the compass housing aid in lining up the compass on a map surface.

The parts of the compass are: The compass base, direction of travel arrow, the compass housing containing the compass needle, orienting arrow and orienting lines.

The four cardinal points of direction are north, south, east and west.

The four intermediate points of direction are northeast, southeast, southwest and northwest.

Direction is measured in degrees.

Distance is measured in meters.

A pace count is measured for 100 meters.

The compass needle always points toward magnetic north.

The saying “Red in the Shed” explains how the compass must be oriented in the direction of travel.

The compass base must be level with the ground to ensure that the compass needle has freedom of movement.

A point of interest is used to aid in travelling in straight line from point to point.

A two person system ensures the most accurate means of achieving both direction and distance.

Map Reading:

A **topographical** map shows the detailed picture of the terrain using **contour lines**. A **contour** **line** is a line representing a certain amount of elevation on the map. **National park** maps feature general information about a park’s major landmarks, hiking trails, campsites, restrooms, swimming, canoeing, and other points of interest.

The map’s **legend** is the scale of the map explaining the various symbols that can be found on the map such as bodies of water, railroad tracks, trails or roads. The following **colors** are used in a map denote the main features of a map: Blue – water (lakes, rivers, streams, creeks), Brown – earth formations (hills, mountains, cliffs), Green – vegetation (meadows, valleys, forests), Black – man-made objects (buildings, roads, railroad tracks)

The **declination factor** is the difference between magnetic north (0 degrees) and the change in longitude either east or west of the magnetic line. For example: If a location is west of the magnetic line the declination factor will be x degrees to the east. If the location is east of the magnetic line the declination factor will be x degrees to the west.

The declination factor must be taken into account when calculating the direction of travel. If a compass reading is calculated for 60 degrees and the declination is 10 degrees east, the corrected azimuth is 70 degrees (add 10 degrees). However, the declination is 10 degrees west then the corrected azimuth is 50 degrees (subtract 10 degrees).