Name: _____

The Lacrosse Ball

GRADES 3-5

Describe how each ball would function as a lacrosse ball. Think about the distance and bounce-ability of each ball type.

Baseball:

Golf ball:

Ping Pong ball:

Softball:

Tennis ball:

Using the data collected, identify properties and materials that support a lacrosse ball's function.

	Size/Shape	Materials	Weight	Texture	Other Features
Baseball					
Golf ball					
Ping Pong Ball					
Softball					
Tennis ball					

Module 2.0

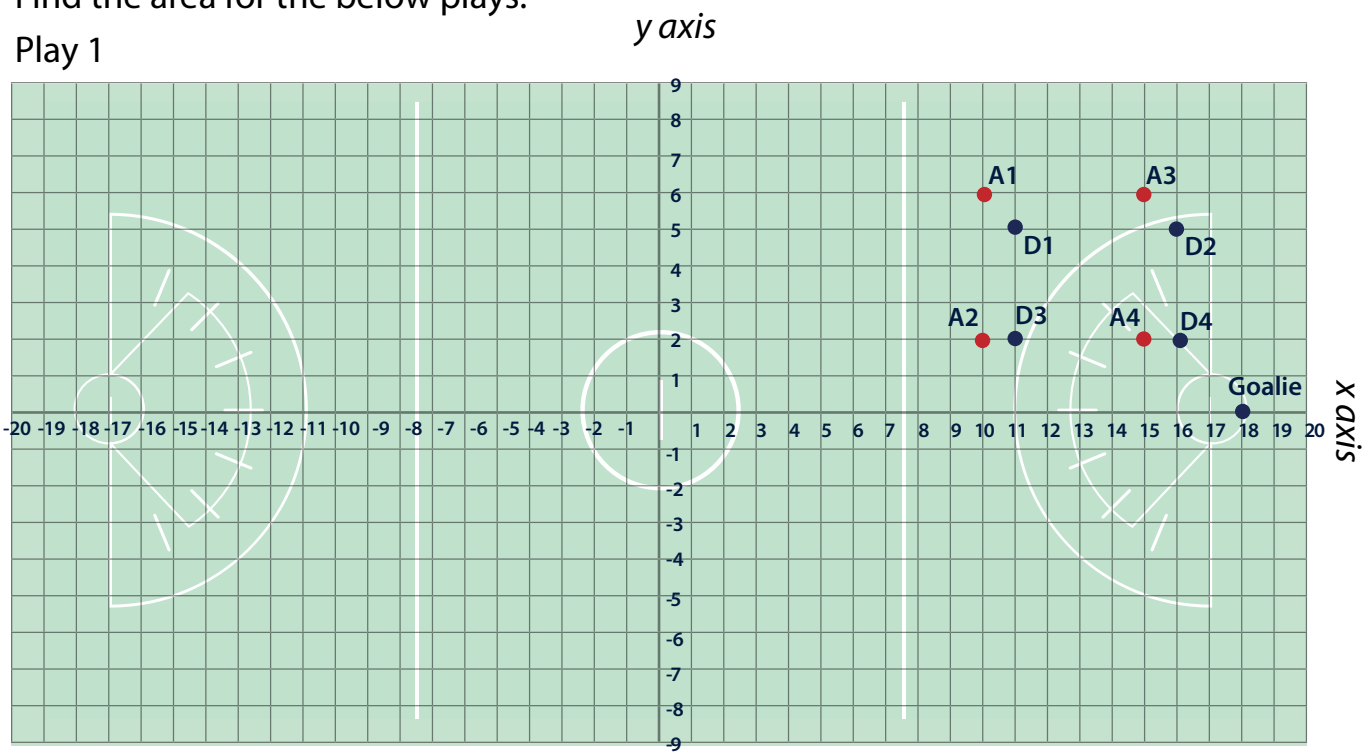
Name: _____

The Playing Field

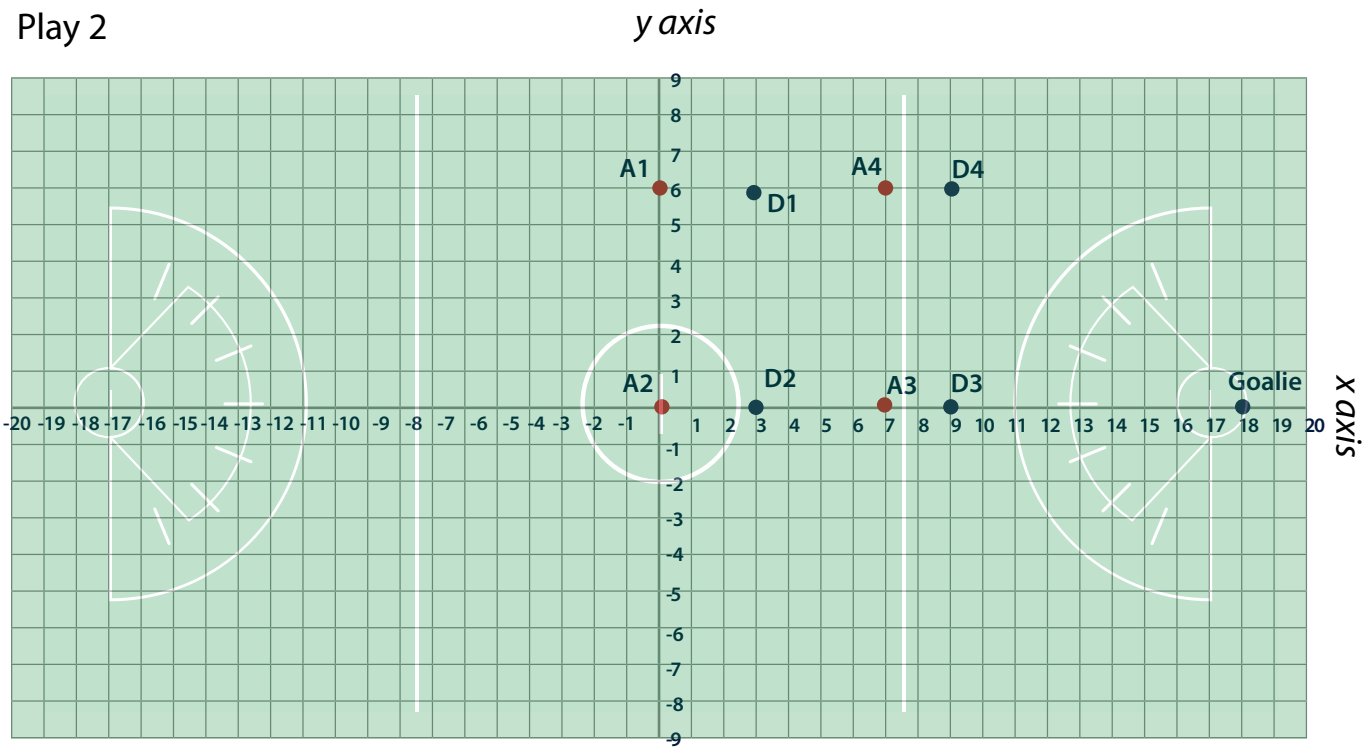
GRADES 3-5

Find the area for the below plays:

Play 1



Play 2



Name: _____

Energy in Lacrosse

GRADES 3-5

Trial 1: Kneeling Position

Distance: _____

	Pass 1	Pass 2	Pass 3	Pass 4	Pass 5
Partner 1					
Partner 2					

Trial 1: Speed Calculations (Distance/Time)

	Pass 1 Speed	Pass 2 Speed	Pass 3 Speed	Pass 4 Speed	Pass 5 Speed
Partner 1					
Partner 2					

Name: _____

Energy in Lacrosse

GRADES 3-5

Trial 2: Standing Position: Focusing on using your lower and upper body to pass and release.

	Pass 1	Pass 2	Pass 3	Pass 4	Pass 5
Partner 1					
Partner 2					

Trial 2: Speed Calculations (Distance/Time)

	Pass 1 Speed	Pass 2 Speed	Pass 3 Speed	Pass 4 Speed	Pass 5 Speed
Partner 1					
Partner 2					

Which trial generated the most energy? Please explain using scientific reasoning from each trial.

Name: _____

Force of a Lacrosse Ball

GRADES 3-5

Questions:

1. How does a lacrosse ball move?

2. How does a lacrosse ball stop moving?

3. Hypothesis: What do you think will make a lacrosse ball move and why?

4. Based on evidence from your experiment, how does force create motion?

Module 6.0

Name: _____

How Far Can You Throw It?

GRADES 3-5

Measure Length of Passes (in feet)

	Pass 1	Pass 2	Pass 3	Pass 4	Range
Partner 1					
Partner 2					

Measure Length of Passes (Circle one: meters, centimeters, inches, millimeters or yards)

	Pass 1	Pass 2	Pass 3	Pass 4	Range
Partner 1					
Partner 2					

What is the best way to measure distance of a pass? Please explain.

_____

_____

_____

_____

_____

Name: _____

Headgear

GRADES 3-5

Brainstorm Multiple Designs

Select a Single Design: Draw in detail, label materials, and provide measurements

Module 8.0

Name: _____

Wearable Technology

GRADES 3-5

Elaborate

Criteria	Constraints

Name: _____

Wearable Technology

GRADES 3-5

Evaluate

Visual	Use of Energy/Resources	Meets Criteria	Avoids Constraint
Video Camera	Potential energy to electrical energy		
Clip Board	No energy transfer		
Helmet Camera	Potential energy to electrical energy		
Speaker	Potential energy to sound energy		
GPS Tracker	Potential energy to electrical energy		
Smartwatch	Potential energy to light energy		