COURSE	PHYSICAL EDUCATION	GRADE:	GRADE 6 BENCHMARK ASSESSMENT FOR STANDARD B
STATE STANDARD:	10.4.6 PHYSICAL ACTIVITY	TIME FRAME:	
STANDARD STATEMENT:	B - EXPLAIN THE EFFECTS OF REGULAR PARTICIPATION IN MODERATE TO VIGOROUS PHYSICAL ACTIVITIES ON THE BODY SYSTEMS		

UNIT OF INSTRUCTION: FITNESS

OBJECTIVES/ESSENTIAL CONTENT	ASSESSMENT	LEARNING ACTIVITIES
STANDARD STATEMENT B **OBJECTIVE:** EXPLAIN THE EFFECTS OF REGULAR PARTICIPATION IN MODERATE TO VIGOROUS ACTIVITIES ON THE BODY SYSTEMS. • **CARDIOVASCULAR**: THIS SYSTEM INCLUDES THE HEART AND BLOOD VESSELS. THE HEART PUMPS THE BLOOD AND THE ARTERIES AND VEINS TRANSPORT IT. IT ALSO INCLUDES THE RESPIRATORY SYSTEM. THIS SYSTEM CARRIES OXYGEN FROM THE AIR TO THE BLOOD STREAM AND EXPELS CARBON DIOXIDE FROM THE BODY. THE HEART PUMPS THE OXYGEN INTO THE BLOOD AND COLLECTS CARBON DIOXIDE FROM IT TO BE EXPELLED THROUGH THE LUNGS. THIS SYSTEM IS BASIC TO LIFE AND BREATHING. ITS AUTOMATIC FUNCTIONS ARE CONTROLLED BY THE BRAIN. HEART RATE INCREASES BUT RESTING HEART RATE DECREASES. • **RESPIRATORY SYSTEM**: THIS SYSTEM MOVES OXYGEN FROM THE OUTSIDE ENVIRONMENT INTO THE BODY AND THAN REMOVES CARBON DIOXIDE. IT INCLUDES THE NOSE, TRACHEA, LUNGS, AND BRONCHI. WHEN YOU BREATHE IN AIR ENTERS YOUR NOSE/MOUTH AND GOES INTO THE TRACHEA. THE TRACHEA BRANCHES INTO TWO BRONCHIAL TUBES WHICH GO TO THE LUNGS. THE PRIMARY BRONCHI BRANCHES OFF INTO SMALLER TUBES WHICH END IN THE ALVEOLI (AIR SACS). OXYGEN FOLLOWS THIS PATH AND ENTERS THE BLOOD STREAM. AT THE SAME CARBON DIOXIDE PASSES INTO THE LUNGS AND IS EXHALED. BREATHING RATE INCREASES DURING ACTIVITY AND RETURNS TO NORMAL FASTER AS FITNESS LEVEL INCREASES. • **MUSCULAR SYSTEM**: THIS SYSTEM IS MADE UP OF TISSUES (MUSCLES) THAT WORK WITH THE SKELETAL SYSTEM TO CONTROL MOVEMENT OF THE BODY. MUSCLES ARE EITHER VOLUNTARY- MEANING YOU DECIDE TO MOVE THEM, OR INVOLUNTARY WHICH MOVE AUTOMATICALLY. THERE ARE THREE TYPES OF MUSCLES, THE SKELETAL, SMOOTH AND CARDIAC. THE SKELETAL MUSCLES MOVE THE BOY AND ARE VOLUNTARY. THE SMOOTH MUSCLES ARE INVOLUNTARY AND ARE LOCATED INSIDE ORGANS. THE CARDIAC MUSCLES ARE FOUND ONLY IN THE HEART AND ARE INVOLUNTARY. INCREASE IN STRENGTH AND ENDURANCE. • **SKELETAL SYSTEM:** MADE UP OF BONES LIGAMENTS AND TENDONS. IT SHAPES THE BODY AND PROTECTS ORGANS. THIS SYSTEM WORKS WITH THE MUSCULAR SYSTEM TO MOVE THE BODY. INCREASE IN BONE STRENGTH THROUGH WEIGHT BEARING EXERCISES. • **ENDOCRINE:** THIS SYSTEM CONSISTS OF GLANDS AND HORMONES. GLANDS INCLUDE THE PITUITARY, THYROID, AND RELEASE HORMONES DIRECTLY INTO THE BLOODSTREAM. HORMONES ARE CHEMICALS THAT CONTROL BODY FUNCTIONS SUCH AS METABOLISM, GROWTH AND DEVELOPMENT. THROUGH EXERCISE THE METABOLISM INCREASES.	• LOG HEART RATE IN RELATION TO DIFFERENT ACTIVITIES. • PERSONAL FITNESS PROFILE • FITNESS GOALS • FITNESS CARD TO DOCUMENT HEART HEALTH AND PULSE IN ACTIVITIES. • SELF EVALUATION OF EFFECT OF EXERCISE ON THE BODY/SYSTEMS. • BODY SYSTEMS QUIZ	• CIRCUIT TRAINING • AEROBIC ACTIVITIES • ANAEROBIC ACTIVITIES • FITNESS CENTER • ADVENTURE ACTIVITIES • TAG GAMES • AQUATICS

	• **MODERATE ACTIVITY:** IS DEFINED AS ACTIVITY OF INTENSITY EQUAL TO A BRISK WALK AND CAN BE PERFORMED FOR RELATIVELY LONG PERIODS OF TIME WITHOUT FATIGUE. IT IS RECOMMENDED THAT YOU PARTICIPATE FOR 30 MINUTES EACH DAY. • **VIGOROUS ACTIVITY**: MOVEMENT THAT EXPANDS MORE ENERGY AND IS PERFORMED AT A HIGHER LEVEL OF INTENSITY. THESE ACTIVITIES RAISE YOUR BREATHING AND HEART RATE. IT IS RECOMMENDED THAT YOU PARTICIPATE FOR 20 MINUTES AT LEAST THREE TIMES A WEEK.		

ENRICHMENT:	• SET UP A FITNESS PLAN AND FOLLOW IT FOR ONE MONTH. REFLECT ON PROGRESS AND EFFECTS/IMPROVEMENT ON THE BODY SYSTEMS.
REMEDIATION:	• REVIEW WORKSHEET INFORMATION ABOUT EACH SYSTEM AND WRITE A PARAGRAPH SUMMARIZING THE FUNCTION OF EACH.
RESOURCES:	*ELEMENTARY HEART HEALTH: LESSONS AND ASSESSMENT* (2001), BY D. BAKER, NASPE PUBLICATIONS, RESTON, VA *FITNESS FOR LIFE: MIDDLE SCHOOL,* BY CHARLES B. CORBIN, GUY LE MASURIER, DOLLY D. LAMBDIN, HUMAN KNETICS (2007), CHAMPAIGN, IL *DR. SAUL'S BIOLOGY IN MOTION(2005), CARDIOVASCULAR SYSTEM,* RETRIEVED: 6/25/2008 HTTP://WWW.BIOLOGYINMOTION.COM/CARDIO/INDEX.HTML *ASSESSING AND IMPROVING FITNESS IN ELEMENTARY PHYSICAL EDUCATION,* HOLT/HALE (1999) NASPE PUBLICATIONS, RESTON, VA *INFORMATION PLEASE (2008),YOUR BODY SYSTEMS,* RETRIEVED: 6/25/2008 HTTP://WWW.FACTMONSTER.COM/IPKA/A0774536.HTML *INTELLIMED INTERNATIONAL CORPORATION (2008), CARDIOVASCULAR SYSTEM,* RETRIEVED: 6/25/2008 FROM: HTTP://WWW.INNERBODY.COM/IMAGE/CARDOV/HTML *NEMOURS FOUNDATION (2008) BODY SYSTEMS,* RETRIEVED: 07/08/2008 HTTP://KIDSHEALTH.ORG/KID/HTBW/HTBW_MAIN_PAGE.HTML. PENNSYLVANIA DEPARTMENT OF EDUCATION STANDARDS ALIGNED SYSTEMS: HEALTH AND PHYSICAL EDUCATION

COURSE	PHYSICAL EDUCATION	GRADE:	GRADE 6 BENCHMARK ASSESSMENT FOR STANDARD D
STATE STANDARD:	10.5.6 CONCEPTS, PRINCIPLES AND STRATEGIES OF MOVEMENT	TIME FRAME:	
STANDARD STATEMENT:	D - DESCRIBE AND APPLY THE PRINCIPLES OF EXERCISE TO THE COMPONENTS OF HEALTH-RELATED AND SKILL-RELATED FITNESS.		

UNIT OF INSTRUCTION: FITNESS

OBJECTIVES/ESSENTIAL CONTENT	ASSESSMENT	LEARNING ACTIVITIES
STANDARD STATEMENT D **OBJECTIVE:** DESCRIBE AND APPLY THE PRINCIPLES OF EXERCISE TO THE COMPONENTS OF HEALTH-RELATED AND SKILL-RELATED FITNESS. • **REVIEW HEALTH-RELATED FITNESS COMPONENTS:** ▪ *CARDIO RESPIRATORY FITNESS:* A HEALTH RELATED COMPONENT OF PHYSICAL FITNESS RELATING TO THE ABILITY OF THE CIRCULATORY AND RESPIRATORY SYSTEMS TO SUPPLY OXYGEN DURING SUSTAINED PHYSICAL ACTIVITY. ▪ *MUSCULAR STRENGTH:* A HEALTH-RELATED COMPONENT OF PHYSICAL FITNESS THAT RELATES TO THE ABILITY OF THE MUSCLE TO EXERT FORCE. ▪ *MUSCULAR ENDURANCE:* A HEALTH-RELATED COMPONENT OF PHYSICAL FITNESS THAT RELATES TO THE ABILITY OF A MUSCLE TO CONTINUE TO PERFORM WITHOUT FATIGUE. ▪ *FLEXIBILITY:* HEALTH-RELATED COMPONENT OF PHYSICAL FITNESS THAT RELATES TO THE RANGE OF MOTION AVAILABLE AT A JOINT. ▪ *BODY COMPOSITION:* A HEALTH-RELATED COMPONENT OF PHYSICAL FITNESS THAT RELATES TO THE PERCENTAGE OF FAT TISSUE AND LEAN TISSUE IN THE BODY • **REVIEW SKILL-RELATED FITNESS COMPONENTS:** ▪ *AGILITY:* A COMPONENT OF PHYSICAL FITNESS THAT RELATES TO THE ABILITY TO RAPIDLY CHANGE THE POSITION OF THE ENTIRE BODY IN SPACE WITH SPEED AND ACCURACY. ▪ *BALANCE:* A SKILL-RELATED COMPONENT OF PHYSICAL FITNESS THAT RELATES TO THE MAINTENANCE OF EQUILIBRIUM WHILE STATIONARY OR MOVING. ▪ *COORDINATION:* A SKILL-RELATED COMPONENT OF PHYSICAL FITNESS THAT RELATES TO THE ABILITY TO USE THE SENSES TOGETHER WITH BODY PARTS IN PERFORMING MOTOR TASKS SMOOTHLY AND ACCURATELY. ▪ *POWER:* SKILL-RELATED COMPONENT OF PHYSICAL FITNESS THAT RELATES TO THE RATE AT WHICH ONE CAN PERFORM WORK.	• LOG/FITNESSGRAM • JOURNAL • FITNESS PLAN • JOURNAL ABOUT PLAN IMPLEMENTATION • PRESCRIPTION FOR GOOD HEALTH PG. 145 • OPEN ENDED QUESTIONS PG. 196-197	• FITNESS CENTER • AEROBIC/ANAEROBIC STATIONS • CIRCUIT TRAINING • DEVELOP A 2 WEEK CARDIO-RESPIRATORY ENDURANCE FITNESS PLAN USING PRINCIPLES OF EXERCISE.

- *REACTION TIME*: A SKILL-RELATED COMPONENT OF PHYSICAL FITNESS THAT RELATES TO THE TIME ELAPSED BETWEEN STIMULATION AND THE BEGINNING OF THE RESPONSE TO IT.

- *SPEED:* SKILL-RELATED COMPONENT OF PHYSICAL FITNESS THAT RELATES TO THE ABILITY TO PERFORM A MOVEMENT OR COVER A DISTANCE IN A SHORT PERIOD OF TIME.

- **REVIEW THE FITT PRINCIPLE:**
  - ***F****REQUENCY:* DESCRIBES HOW OFTEN A PERSON PERFORMS THE TARGETED HEALTH RELATED FITNESS
  - ***I****NTENSITY:* DESCRIBES HOW HARD A PERSON EXERCISES DURING PHYSICAL ACTIVITY PERIOD DEPENDS ON THE AGE AND FITNESS GOALS OF THE PARTICIPANT.
  - ***T****IME:* DESCRIBES HOW LONG THE ACTIVITY SHOULD BE PERFORMED
  - ***T****YPE:* REFERS TO MODE OR WHAT KIND OF ACTIVITY A PERSON CHOOSES TO PERFORM

- **THE FITT PRINCIPLE APPLIED TO CARDIO-RESPIRATORY ENDURANCE:**
  - **F**=ALL OR MOST DAYS A WEEK (3-6 SESSIONS PER WEEK)
  - **I**= MODERATE TO VIGOROUS ACTIVITY – HEART RATE AS AN INDICATOR
  - **T**= 30-60 MINUTES DAILY ACTIVITY (20 MINUTES OR MORE IN EACH SESSION)
  - **T**= SELECT ACTIVITIES FROM LEVEL ONE LIFETIME PHYSICAL ACTIVITIES AND LEVEL TWO ACTIVE AEROBIC ACTIVITIES OF THE PHYSICAL ACTIVITY PYRAMID.

- **THE FITT PRINCIPLE APPLIED TO ISOTONIC EXERCISES FOR STRENGTH**.
  - **F**=TWO OR THREE DAYS A WEEK (NON CONSECUTIVE DAYS)
  - **I**=MODERATE RESISTANCE EXERCISES THAT YOU CAN DO 15 TIMES OR FEWER
  - **T**= ONE SET OF 10-15 REPS
  - **T**= SELECT ACTIVITIES FROM LEVEL THREE STRENGTH AND MUSCULAR ENDURANCE OF THE PHYSICAL ACTIVITY PYRAMID.

- **THE FITT PRINCIPLE APPLIED TO ISOTONIC EXERCISES FOR MUSCULAR ENDURANCE.**
  - **F**= THREE TO SIX DAYS A WEEK
  - **I**=LOW RESISTANCE EXERCISES THAT YOU CAN DO AT LEAST 25 TIMES/REPS.
  - **T**= ONE TO THREE SETS OF 11 TO 25 REPS
  - **T**= SELECT ACTIVITIES FROM LEVEL 3 STRENGTH AND MUSCULAR ENDURANCE OF THE PHYSICAL ACTIVITY PYRAMID.

	• **THE FITT PRINCIPLES APPLIED TO FLEXIBILITY:** ▪ **F**= STRETCH DAILY IF POSSIBLE; IF NOT AT LEAST 3 TIMES PER WEEK. ▪ **I**= STRETCH SO THAT YOU FEEL TENSION IN THE MUSCLE AND EVEN A SLIGHT BURNING SENSATION, BUT YOU SHOULD NOT FEEL PAIN. ▪ **T**= HOLD EACH STRETCH 15-30 SECONDS. PERFORM 1-3 TIMES. REST AT LEAST 10 SECONDS AFTER EACH STRETCH. ▪ **T**= SELECT ACTIVITIES FROM LEVEL 3 FLEXIBILITY ACTIVITIES OF THE PHYSICAL ACTIVITY PYRAMID.		

ENRICHMENT:	
REMEDIATION:	
RESOURCES:	*FITNESS FOR LIFE: MIDDLE SCHOOL*, BY CHARLES B. CORBIN, BUY LE MASURIER, DOLLY D. LAMBDIN, HUMAN KNETICS (2007), CHAMPAIGN, IL *PHYSICAL EDUCATION FOR LIFELONG FITNESS: THE PHYSICAL BEST TEACHER'S GUIDE,* NASPE (2005), HUMAN KINETICS, CHAMPAIGN, IL PENNSYLVANIA DEPARTMENT OF EDUCATION STANDARDS ALIGNED SYSTEMS: HEALTH AND PHYSICAL EDUCATION *FITNESSGRAM/ACTIVITYGRAM TEST ADMINISTRATION MANUAL-4TH EDITION,* THE COOPER INSTITUTE (2007)

FORM 6.15 **Apply Your Fitness Knowledge—Components**

Name _____ **Date** _____

Directions: All physical activities require specific combinations of health-related fitness components and skill-related fitness components. Choose the two major health-related fitness components for _____ and explain how having high levels of these components will help participants be more successful.

1. _____

2. _____

Assessment: Your work will be scored according to the criteria in the following rubric. Use this information to self-assess your work before you hand it in.

4	Excellent work! You went above and beyond!	Each response is complete and correct. Two health-related fitness components are identified, and their relationships to the specified activity are provided. Artwork, specific examples, or details that support answers are included.
3	Good work. Everything is here!	Each response is complete and correct. Two health-related fitness components are identified, and their relationships to the specified activity are provided.
2	Good attempt. Just a few things are missing. Would you like to try this one again?	One response is complete and correct. One health-related fitness component is identified, and its relationship to the specified activity is provided.
1	Let's be sure that you understand. I recommend that you try this one again. See me for more explanation.	No complete and correct answers are provided. No health-related fitness components are identified.

Fro

m Physical Education Assessment Toolkit by Liz Giles-Brown, 2006, Champaign, IL: Human Kinetics.

FORM 6.16

Apply Your Fitness Knowledge—Prescribe It

Name _____ **Date** _____

Directions: Jessie wants to train for _____. Identify two skill-related fitness components that are important for her to develop to be successful in this activity and prescribe one exercise or activity that she can do to help her reach her training goals for each component.

1.	2.

Assessment:
information to self-assess your work before you hand it in.

4	Excellent work! You went above and beyond!	Each response is complete and correct. Two skill-related fitness components are identified, and a prescription for a related training activity for each is provided. Artwork, specific examples, or details that support answers are included.
3	Good work. Everything is here!	Each response is complete and correct. Two skill-related fitness components are identified, and a prescription for a related training activity for each is provided.
2	Good attempt. Just a few things are missing. Would you like to try this one again?	One item is missing or incorrect. One of the two skill-related fitness components identified or a related exercise or activity is incorrect.
1	Let's be sure that you understand. I recommend that you try this one again. See me for more explanation.	No complete and correct answers are provided. Skill-related fitness components or related training activities are incorrect or missing.

COURSE	PHYSICAL EDUCATION	GRADE:	GRADE 6 BENCHMARK ASSESSMENT FOR STANDARDS E-F
STATE STANDARD:	10.5.6 CONCEPTS, PRINCIPLES AND STRATEGIES OF MOVEMENT	TIME FRAME:	
STANDARD STATEMENT:	E - IDENTIFY AND USE SCIENTIFIC PRINCIPLES THAT AFFECT BASIC MOVEMENT AND SKILLS USING APPROPRIATE VOCABULARY. F - IDENTIFY AND APPLY GAME STRATEGIES TO BASIC GAMES AND PHYSICAL ACTIVITIES.		

UNIT OF INSTRUCTION: INVASION GAMES

OBJECTIVES/ESSENTIAL CONTENT	ASSESSMENT	LEARNING ACTIVITIES
STANDARD STATEMENT E **OBJECTIVE:** IDENTIFY AND USE SCIENTIFIC PRINCIPLES THAT AFFECT BASIC MOVEMENT AND SKILLS USING APPROPRIATE VOCABULARY. • **STATIC AND DYNAMIC BALANCE:** REINFORCE • **FLIGHT:** REINFORCE • **NEWTON'S LAWS OF MOTION:** REINFORCE • **APPLICATION OF FORCE:** REINFORCE • **LEVERS:** LEVERS ARE DIVIDED INTO THREE CLASSES. CLASSIFICATION IS BASED ON HOW THE FORCE, RESISTANCE AND AXIS ARE POSITIONED ON THE LEVER IN RELATION TO EACH OTHER. ▪ *1ST CLASS LEVER:* THE AXIS IS BETWEEN THE RESISTANCE AND FORCE. (THINK OF A LEG PRESS MACHINE) ▪ *2ND CLASS LEVER:* THE RESISTANCE IS POSITIONED BETWEEN THE AXIS AND THE FORCE. (THINK OF A BENCH PRESS MACHINE.) ▪ *3RD CLASS LEVER*: THE FORCE IS POSITIONED BETWEEN THE AXIS AND RESISTANCE. (THINK OF BICEP CURL, WHERE THE AXIS IS THE ELBOW, FORCE IS TENSION OF MUSCLE IN BICEP, AND RESISTANCE IS THE DUMBBELL IN HAND.)	• PROJECT IDENTIFYING SCIENTIFIC PRINCIPLES TO ACTIVITY OF CHOICE. • TEACHER OBSERVATION	• BASKETBALL • SOCCER • FOOTBALL • ULTIMATE BALL • FLOOR HOCKEY • TCHOUKBALL
STANDARD STATEMENT F **OBJECTIVE:** IDENTIFY AND APPLY GAME STRATEGIES TO BASIC GAMES AND PHYSICAL ACTIVITIES. • **GIVE AND GO:** REINFORCE • **ONE ON ONE:** REINFORCE	• PEER/GROUP OBSERVATION • PEER COMMUNICATION CHECKLIST	

	• **PEER COMMUNICATION:** REINFORCE **BASIC CONCEPTS FOR INVASION GAMES:** REINFORCE		

ENRICHMENT:	• THE STUDENTS WILL CREATE A JOURNAL OR LOG OF ACTIVITIES OUTSIDE OF SCHOOL THAT ARE LOCOMOTOR, NON LOCOMOTOR, AND MANIPULATIVE. • THE STUDENTS WILL WATCH A COLLEGE OR PROFESSSIONAL SPORTING EVENT AND LIST THE MOVEMENT SKILLS THAT WERE DEMONSTRATED. • ASSIST STUDENTS HAVNIG DIFFICULTUY WITH SKILLS/CONCEPTS
REMEDIATION:	• TASK CARDS SHOWING MOVEMENT SEQUENCES • TEACHER WORKING WITH THE STUDENT INDIVIDUALLY • PEER COACHING
RESOURCES:	*OBJECTS IN MOTION: PRINCIPLES OF CLASSICAL MECHANICS*, BY PAUL FLEISHER (2002), LERNER PUBLICATIONS COMPANY, MINNEAPOLIS, MI *CREATING RUBRICS FOR PHYSICAL EDUCATION,* BY JACALYN LUND, AAHPERD PUBLICATIONS (2000), OXON HILL, MD *PHYSICAL BEST ACTIVITY GUIDE, BY NASPE , HUMAN KINETICS (2005), CHAMPAIGN, IL* *PHYSICAL EDUCATION ASSESSMENT TOOLKIT,* BY LIZ GILES-BROWN, UNITED GRAPHICS (2006), CHAMPAIGN, IL *SPORTS AND FITNESS NUTRITION,* BY BARRY MILLER AND ROBERT WILDMAN, THOMASON AND WADSWORTH (2004) BELMONT, CA *ASSESSMENT STRATEGIES FOR ELEMENTARY PHYSICAL EDUCATION,* BY SUZANN SCHIEMER, VERSA PRESS (2000), CHAMPAIGN, IL PENNSYLVANIA DEPARTMENT OF EDUCATION STANDARDS ALIGNED SYSTEMS: HEALTH AND PHYSICAL EDUCATION

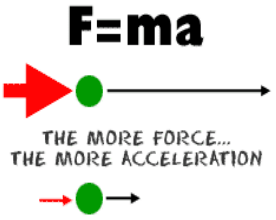
Name: _____
Standard 10.5.6.E- Cognitive assessment

Fill in the blanks.

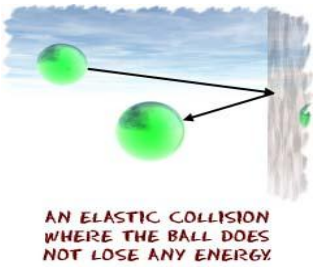
1. Sir Isaac Newton came up with the three basic ideas that are applied to the physics of most _____. (motion)
2. External factors that affect the force the body can produce are _____ & _____. (ex. strength & speed)
3. The two types of balance are _____ & _____. (static dynamic)
4. _____ is when an object or person is projected into the air. (flight)
5. There are _____ classes of levers. (three)
6. The three parts that make up a lever are _____, _____, and _____. (axis, resistance, force- acronym ARF)

Matching.

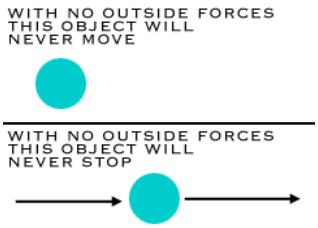
1. Law of Inertia



2. Law of Acceleration



3. Law of Action/Reaction



TEACHER OBSERVATION

Standard 10.5.6.E- Tchoukball psychomotor assessment

Student name	Offense: Using force for shooting	Defense: Placement based on action/reaction

Rubric

	Excellent (receives star)	Good (receives check)	Needs Improvement (receives minus)	Not evident (receives a question mark)
Offense	Analyze shot and amount of force needed to avoid defense, applies varying force- uses action/reaction to determine angle for shot	Uses both principles but not consistently	Uses force appropriately but angle needs more work (or vice versa)	Student was not seen using this skill during game play
Defense	Analyze offensive positioning and force to position self for block	Uses both principles but not consistently	Analyzes force appropriately but angle needs more work (or vice versa)	Student was not seen using this skill during game play

Final Project

Directions: We learned about Newton's three laws of motion while enjoying ourselves with (game).
Now it is your turn. Choose one, two or three activities you really enjoy. You have to explain an example from that activity for each law.

You may use one activity to describe all three or you can pick a different activity for each law. It is completely up to you.

	Excellent (4 - 5 pts)	Good (3 - 4 pts)	Needs improvement (1-2 pts)
Law of Inertia	Gave a detailed example of an activity that would demonstrate this law.	Gave a correct example for this law but explanation was not detailed.	Example did not provide an example for this law
Law of Acceleration	Gave a detailed example of an activity that would demonstrate this law.	Gave a correct example for this law but explanation was not detailed.	Example did not provide an example for this law
Law of action/reaction	Gave a detailed example of an activity that would demonstrate this law.	Gave a correct example for this law but explanation was not detailed.	Example did not provide an example for this law
Overall	Project was creative, neat and easy to follow	Project was neat and easy to follow	Project did not show much effort

FORM 7.6 **Invasion Games—Self-Assessment**

Name _____ **Date** _____

Directions: Assess yourself by shading in the learning line following each strategy that you use during _____.

1. I consistently move to the open spaces to get open when I'm playing offense.

never some of the time most of the time

2. I'm always ready and maintain a good athletic position. My opponent has a hard time guarding me when I'm playing offense.

never some of the time a lot of the time most of the time

3. I make it hard for my opponent to get open, pass, or score when I'm playing defense.

never some of the time most of the time

4. I communicate well with my teammates so that we all work more efficiently as a group. I am open-minded and willing to listen to feedback from teammates.

never some of the time most of the time

From *Physical Education Assessment Toolkit* by Liz Giles-Brown, 2006, Champaign, IL: Human Kinetics.

FORM 7.6 **Invasion Games—Self-Assessment**

Name _____ **Date** _____

Directions: Assess yourself by shading in the learning line following each strategy that you use during _____.

1. I consistently move to the open spaces to get open when I'm playing offense.

never some of the time most of the time

2. I'm always ready and maintain a good athletic position. My opponent has a hard time guarding me when I'm playing offense.

never some of the time a lot of the time most of the time

3. I make it hard for my opponent to get open, pass, or score when I'm playing defense.

never some of the time most of the time

4. I communicate well with my teammates so that we all work more efficiently as a group. I am open-minded and willing to listen to feedback from teammates.

never some of the time most of the time

From *Physical Education Assessment Toolkit* by Liz Giles-Brown, 2006, Champaign, IL: Human Kinetics.

FORM 7.8 **Net Games—Self-Assessment**

Name _____ **Date** _____

Directions: Assess yourself by shading in the learning line following each strategy that you use during _____.

1. I maintain an athletic ready position and am focused on the play. It is difficult for my opponent to score.

never some of the time most of the time

2. I attempt to send the ball or object to open areas so that my opponent has to move to play it.

never some of the time most of the time

3. I use a variety of shots so that it is hard for my opponent to predict what I will do from one play to the next.

never some of the time most of the time

From Physical Education Assessment Toolkit by Liz Giles-Brown, 2006, Champaign, IL: Human Kinetics.

FORM 7.8 **Net Games—Self-Assessment**

Name _____ **Date** _____

Directions: Assess yourself by shading in the learning line following each strategy that you use during _____.

1. I maintain an athletic ready position and am focused on the play. It is difficult for my opponent to score.

never some of the time most of the time

2. I attempt to send the ball or object to open areas so that my opponent has to move to play it.

never some of the time most of the time

3. I use a variety of shots so that it is hard for my opponent to predict what I will do from one play to the next.

never some of the time most of the time

From *Physical Education Assessment Toolkit* by Liz Giles-Brown, 2006, Champaign, IL: Human Kinetics.

FORM 7.9 **Fielding Games—Self-Assessment**

Name _____ **Date** _____

Directions: Assess yourself by shading in the learning line following each strategy that you use during _____.

1. I try to send the ball or object to the open spaces so that fielders have to move to stop it when I'm playing offense.

never some of the time most of the time

2. I maintain an athletic ready position and stay focused on the ball. I am never caught standing up or not paying attention when I'm playing defense.

never some of the time most of the time

3. I move to get in front of the ball or object when it is hit to my area when I'm playing defense.

never some of the time most of the time

4. I am ready and move to back up teammates when necessary when I'm playing defense.

never some of the time most of the time

FORM 7.9 **Fielding Games—Self-Assessment**

Name _____ **Date** _____

Directions: Assess yourself by shading in the learning line following each strategy that you use during _____.

1. I try to send the ball or object to the open spaces so that fielders have to move to stop it when I'm playing offense.

never some of the time most of the time

2. I maintain an athletic ready position and stay focused on the ball. I am never caught standing up or not paying attention when I'm playing defense.

never some of the time most of the time

3. I move to get in front of the ball or object when it is hit to my area when I'm playing defense.

never some of the time most of the time

4. I am ready and move to back up teammates when necessary when I'm playing defense.

never some of the time most of the time

FORM 7.7 **Target Games—Self-Assessment**

Name _____ **Date** _____

Directions: Assess yourself by shading in the learning line following each strategy that you use during _____.

1. I am relaxed and able to stay focused on each attempt.

never | some of the time | most of the time

2. I do not rush through a shot. I take my time and concentrate on using my best skills.

never | some of the time | most of the time

3. I do not get upset with myself when I make a mistake. I assess the performance and attempt to make adjustments on the next trial.

never | some of the time | most of the time

FORM 7.7 **Target Games—Self-Assessment**

Name _____ **Date** _____

Directions: Assess yourself by shading in the learning line following each strategy that you use during _____.

1. I am relaxed and able to stay focused on each attempt.

never | some of the time | most of the time

2. I do not rush through a shot. I take my time and concentrate on using my best skills.

never | some of the time | most of the time

3. I do not get upset with myself when I make a mistake. I assess the performance and attempt to make adjustments on the next trial.

never | some of the time | most of the time

COURSE:	PHYSICAL EDUCATION	GRADE:	GRADE 6
STATE STANDARD:	10.5.6 CONCEPTS, PRINCIPLES AND STRATEGIES OF MOVEMENT	TIME FRAME:	
STANDARD STATEMENT:	E - IDENTIFY AND USE SCIENTIFIC PRINCIPLES THAT AFFECT BASIC MOVEMENT AND SKILLS USING APPROPRIATE VOCABULARY.		

UNIT OF INSTRUCTION: MOVEMENT

OBJECTIVES/ESSENTIAL CONTENT	ASSESSMENT	LEARNING ACTIVITIES
STANDARD STATEMENT E **OBJECTIVE:** IDENTIFY AND USE SCIENTIFIC PRINCIPLES THAT AFFECT BASIC MOVEMENT AND SKILLS USING APPROPRIATE VOCABULARY. • **DEFINE LEVERS:** LEVERS ARE DIVIDED INTO THREE CLASSES. CLASSIFICATION IS BASED ON HOW THE FORCE, RESISTANCE AND AXIS ARE POSITIONED ON THE LEVER IN RELATION TO EACH OTHER. ▪ *1ST CLASS LEVER:* THE AXIS IS BETWEEN THE RESISTANCE AND FORCE. (THINK OF A LEG PRESS MACHINE) ▪ *2ND CLASS LEVER:* THE RESISTANCE IS POSITIONED BETWEEN THE AXIS AND THE FORCE. (THINK OF A BENCH PRESS MACHINE.) ▪ *3RD CLASS LEVER*: THE FORCE IS POSITIONED BETWEEN THE AXIS AND RESISTANCE. (THINK OF BICEP CURL, WHERE THE AXIS IS THE ELBOW, FORCE IS TENSION OF MUSCLE IN BICEP, AND RESISTANCE IS THE DUMBBELL IN HAND.) • **REVIEW NEWTON'S LAWS OF MOTION:** ▪ *LAW OF INERTIA:* AN OBJECT IN MOTION CONTINUES IN MOTION AND AN OBJECT AT REST REMAINS AT REST UNLESS ACTED UPON BY A FORCE. ▪ *LAW OF ACCELERATION:* ACCELERATION OF AN OBJECT DEPENDS ON TWO THINGS: THE MASS OF AN OBJECT AND THE AMOUNT OF FORCE APPLIED. ○ *MORE FORCE :* GREATER ACCELERATION ○ *MORE MASS:* LESS ACCELERATION WITH EQUAL FORCE ○ *MASS:* AMOUNT OF MATTER OR SUBSTANCE AN OBJECT IS MADE OF ACCELERATION: ANY CHANGE IN MOTION OF AN OBJECT (SPEED OR DIRECTION) ▪ *LAW OF ACTION/REACTION:* FOR EVERY ACTION, THERE IS AN EQUAL AND OPPOSITE REACTION.	• PROJECT IDENTIFYING SCIENTIFIC PRINCIPLES TO ACTIVITY OF CHOICE • TEACHER OBSERVATION • FITNESS PLAN LINKING IMPROVEMENT TO SCIENTIFIC PRINCIPLES	• GYMNASTICS • TRACK & FIELD • AQUATICS

	• **REVIEW APPLICATION OF FORCE:** THE AMOUNT OF ENERGY EXPENDED IN A MOVEMENT. ▪ DIRECTLY RELATED TO MASS. • **REVIEW STATIC AND DYNAMIC BALANCES:** ▪ *STATIC BALANCE:* HAVING NO MOTION: BODIES AT REST OR IN EQUILIBRIUM. ▪ *DYNAMIC BALANCE:* REQUIRES MOVEMENT. • **REVIEW FLIGHT:** FLIGHT IS WHEN OBJECTS OR PERSON IS PROJECTED IN THE AIR. TRAJECTORY DEPENDS ON THEIR VELOCITY (SPEED, DIRECTION), HEIGHT AND ANGLE OF RELEASE. (THINK OF A BASEBALL PLAYER PITCHING A BALL OR SOMEONE THROWING A JAVELIN)		

ENRICHMENT:	
REMEDIATION:	
RESOURCES:	*OBJECTS IN MOTION: PRINCIPLES OF CLASSICAL MECHANICS*, BY PAUL FLEISHER (2002), LERNER PUBLICATIONS COMPANY, MINNEAPOLIS, MI PENNSYLVANIA DEPARTMENT OF EDUCATION STANDARDS ALIGNED SYSTEMS: HEALTH AND PHYSICAL EDUCATION

COURSE	PHYSICAL EDUCATION	GRADE:	GRADE 6 BENCHMARK ASSESSMENT FOR STANDARDS E-F
STATE STANDARD:	10.5.6 CONCEPTS, PRINCIPLES AND STRATEGIES OF MOVEMENT	TIME FRAME:	
STANDARD STATEMENT:	E - IDENTIFY AND USE SCIENTIFIC PRINCIPLES THAT AFFECT BASIC MOVEMENT AND SKILLS USING APPROPRIATE VOCABULARY. F - IDENTIFY AND APPLY GAME STRATEGIES TO BASIC GAMES AND PHYSICAL ACTIVITIES.		

UNIT OF INSTRUCTION: NET/WALL GAMES

OBJECTIVES/ESSENTIAL CONTENT	ASSESSMENT	LEARNING ACTIVITIES
STANDARD STATEMENT E **OBJECTIVE:** IDENTIFY AND USE SCIENTIFIC PRINCIPLES THAT AFFECT BASIC MOVEMENT AND SKILLS USING APPROPRIATE VOCABULARY. • **STATIC AND DYNAMIC BALANCE:** REINFORCE • **FLIGHT:** REINFORCE • **NEWTON'S LAWS OF MOTION:** REINFORCE • **APPLICATION OF FORCE: REINFORCE** • **LEVERS:** LEVERS ARE DIVIDED INTO THREE CLASSES. CLASSIFICATION IS BASED ON HOW THE FORCE, RESISTANCE AND AXIS ARE POSITIONED ON THE LEVER IN RELATION TO EACH OTHER. ▪ *1ST CLASS LEVER:* THE AXIS IS BETWEEN THE RESISTANCE AND FORCE. (THINK OF A LEG PRESS MACHINE) ▪ *2ND CLASS LEVER:* THE RESISTANCE IS POSITIONED BETWEEN THE AXIS AND THE FORCE. (THINK OF A BENCH PRESS MACHINE.) ▪ *3RD CLASS LEVER*: THE FORCE IS POSITIONED BETWEEN THE AXIS AND RESISTANCE. (THINK OF BICEP CURL, WHERE THE AXIS IS THE ELBOW, FORCE IS TENSION OF MUSCLE IN BICEP, AND RESISTANCE IS THE DUMBBELL IN HAND.)	• PROJECT IDENTIFYING SCIENTIFIC PRINCIPLES TO ACTIVITY OF CHOICE. • TEACHER OBSERVATION	• VOLLEYBALL • NET/WALL STATIONS
STANDARD STATEMENT F **OBJECTIVE:** IDENTIFY AND APPLY GAME STRATEGIES TO BASIC GAMES AND PHYSICAL ACTIVITIES. • **PEER COMMUNICATION: REINFORCE** **BASIC CONCEPTS FOR NET/WALL GAMES:** REINFORCE	• PEER/GROUP OBSERVATION • PEER COMMUNICATION CHECKLIST	

ENRICHMENT:	• THE STUDENTS WILL CREATE A JOURNAL OR LOG OF ACTIVITIES OUTSIDE OF SCHOOL THAT ARE LOCOMOTOR, NON LOCOMOTOR, AND MANIPULATIVE. • THE STUDENTS WILL WATCH A COLLEGE OR PROFESSSIONAL SPORTING EVENT AND LIST THE MOVEMENT SKILLS THAT WERE DEMONSTRATED. • ASSIST STUDENTS HAVNIG DIFFICULTUY WITH SKILLS/CONCEPTS
REMEDIATION:	• TASK CARDS SHOWING MOVEMENT SEQUENCES • TEACHER WORKING WITH THE STUDENT INDIVIDUALLY • PEER COACHING
RESOURCES:	*OBJECTS IN MOTION: PRINCIPLES OF CLASSICAL MECHANICS*, BY PAUL FLEISHER (2002), LERNER PUBLICATIONS COMPANY, MINNEAPOLIS, MI *CREATING RUBRICS FOR PHYSICAL EDUCATION,* BY JACALYN LUND, AAHPERD PUBLICATIONS (2000), OXON HILL, MD *PHYSICAL BEST ACTIVITY GUIDE, BY NASPE , HUMAN KINETICS (2005), CHAMPAIGN, IL* *PHYSICAL EDUCATION ASSESSMENT TOOLKIT,* BY LIZ GILES-BROWN, UNITED GRAPHICS (2006), CHAMPAIGN, IL *SPORTS AND FITNESS NUTRITION,* BY BARRY MILLER AND ROBERT WILDMAN, THOMASON AND WADSWORTH (2004) BELMONT, CA *ASSESSMENT STRATEGIES FOR ELEMENTARY PHYSICAL EDUCATION,* BY SUZANN SCHIEMER, VERSA PRESS (2000), CHAMPAIGN, IL PENNSYLVANIA DEPARTMENT OF EDUCATION STANDARDS ALIGNED SYSTEMS: HEALTH AND PHYSICAL EDUCATION

FORM 7.8 **Net Games—Self-Assessment**

Name _____ **Date** _____

Directions: Assess yourself by shading in the learning line following each strategy that you use during _____.

1. I maintain an athletic ready position and am focused on the play. It is difficult for my opponent to score.

never some of the time most of the time

2. I attempt to send the ball or object to open areas so that my opponent has to move to play it.

never some of the time most of the time

3. I use a variety of shots so that it is hard for my opponent to predict what I will do from one play to the next.

never some of the time most of the time

Fro

m Physical Education Assessment Toolkit by Liz Giles-Brown, 2006, Champaign, IL: Human Kinetics.

FORM 7.8 **Net Games—Self-Assessment**

Name _____ **Date** _____

Directions: Assess yourself by shading in the learning line following each strategy that you use during _____.

1. I maintain an athletic ready position and am focused on the play. It is difficult for my opponent to score.

never some of the time most of the time

2. I attempt to send the ball or object to open areas so that my opponent has to move to play it.

never some of the time most of the time

3. I use a variety of shots so that it is hard for my opponent to predict what I will do from one play to the next.

never some of the time most of the time

From *Physical Education Assessment Toolkit* by Liz Giles-Brown, 2006, Champaign, IL: Human Kinetics.

NAME:_____ **DATE:**_____

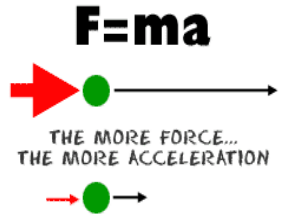
SCIENTIFIC PRINCIPLES ASSESSMENT GRADE 6
BENCHMARK ASSESSMENT 10.5.6.E

FILL IN THE BLANKS

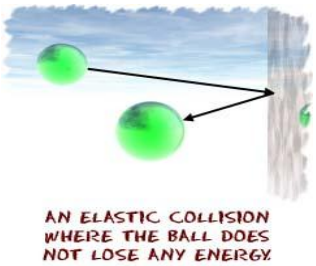
1. Sir Isaac Newton came up with the three laws of _____. (motion)
2. Strength and speed would be two examples of _____ _____ that affect the force the body can produce. (External factors)
3. The two types of balance are _____ & _____. (static, dynamic)
4. _____ is when an object or person is projected into the air. (flight)
5. There are _____ classes of levers. (three)
6. The three parts that make up a lever are _____, _____, and _____. (axis, resistance, force- acronym ARF)

MATCHING

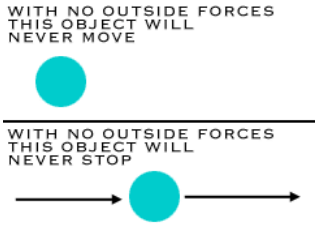
1. Law of Inertia



2. Law of Acceleration



3. Law of Action/Reaction



NAME:_____ **DATE:**_____

TEACHER OBSERVATION

STANDARD 10.5.6.E- TCHOUKBALL PSYCHOMOTOR ASSESSMENT

STUDENT NAME	OFFENSE: USING FORCE FOR SHOOTING	DEFENSE: PLACEMENT BASED ON ACTION/REACTION

RUBRIC

	EXCELLENT (RECEIVES STAR)	GOOD (RECEIVES CHECK)	NEEDS IMPROVEMENT (RECEIVES MINUS)	NOT EVIDENT (RECEIVES A QUESTION MARK)
OFFENSE	Analyze shot and amount of force needed to avoid defense, applies varying force- uses action /reaction to determine angle for shot.	Uses both principles but not consistently.	Uses force appropriately but angle needs more work. (or vice versa)	Student was not seen using this skill during game play.
DEFENSE	Analyze offensive positioning and force to position self for block.	Uses both principles but not consistently.	Analyzes force appropriately but angle needs more work. (or vice versa)	Student was not seen using this skill during game play.

NAME:_____ **DATE:**_____

Final Project

DIRECTIONS: We learned about Newton's three laws of motion while enjoying ourselves with (game). Now it is your turn. Choose one, two or three activities you really enjoy. You have to explain an example from that activity for each law.

You may use one activity to describe all three or you can pick a different activity for each law. It is completely up to you.

	EXCELLENT (4 - 5 PTS)	**GOOD (3 - 4 PTS)**	**NEEDS IMPROVEMENT (1-2 PTS)**
LAW OF INERTIA	Gave a detailed example of an activity that would demonstrate this law.	Gave a correct example for this law but explanation was not detailed.	Example did not provide an example for this law.
LAW OF ACCELERATION	Gave a detailed example of an activity that would demonstrate this law.	Gave a correct example for this law but explanation was not detailed.	Example did not provide an example for this law.
LAW OF ACTION /REACTION	Gave a detailed example of an activity that would demonstrate this law.	Gave a correct example for this law but explanation was not detailed.	Example did not provide an example for this law.
OVERALL	Project was creative, neat and easy to follow.	Project was neat and easy to follow.	Project did not show much effort.

COURSE	PHYSICAL EDUCATION	GRADE:	GRADE 6 BENCHMARK ASSESSMENT FOR STANDARDS E-F
STATE STANDARD:	10.5.6 CONCEPTS, PRINCIPLES AND STRATEGIES OF MOVEMENT	TIME FRAME:	
STANDARD STATEMENT:	E - IDENTIFY AND USE SCIENTIFIC PRINCIPLES THAT AFFECT BASIC MOVEMENT AND SKILLS USING APPROPRIATE VOCABULARY. F - IDENTIFY AND APPLY GAME STRATEGIES TO BASIC GAMES AND PHYSICAL ACTIVITIES.		

UNIT OF INSTRUCTION: STRIKING/FIELDING GAMES

OBJECTIVES/ESSENTIAL CONTENT	ASSESSMENT	LEARNING ACTIVITIES
STANDARD STATEMENT E **OBJECTIVE:** IDENTIFY AND USE SCIENTIFIC PRINCIPLES THAT AFFECT BASIC MOVEMENT AND SKILLS USING APPROPRIATE VOCABULARY. • **STATIC AND DYNAMIC BALANCE:** REINFORCE • **NEWTON'S LAWS OF MOTION:** REINFORCE • **APPLICATION OF FORCE:** REINFORCE • **LEVERS:** LEVERS ARE DIVIDED INTO THREE CLASSES. CLASSIFICATION IS BASED ON HOW THE FORCE, RESISTANCE AND AXIS ARE POSITIONED ON THE LEVER IN RELATION TO EACH OTHER. ▪ *1ST CLASS LEVER:* THE AXIS IS BETWEEN THE RESISTANCE AND FORCE. (THINK OF A LEG PRESS MACHINE) ▪ *2ND CLASS LEVER:* THE RESISTANCE IS POSITIONED BETWEEN THE AXIS AND THE FORCE. (THINK OF A BENCH PRESS MACHINE.) ▪ *3RD CLASS LEVER*: THE FORCE IS POSITIONED BETWEEN THE AXIS AND RESISTANCE. (THINK OF BICEP CURL, WHERE THE AXIS IS THE ELBOW, FORCE IS TENSION OF MUSCLE IN BICEP, AND RESISTANCE IS THE DUMBBELL IN HAND.)	• PROJECT IDENTIFYING SCIENTIFIC PRINCIPLES TO ACTIVITY OF CHOICE. • TEACHER OBSERVATION	• KICKBALL • TEE-BALL • TETHER BALL • WIFFEL BALL • SOFTBALL • STRIKING/FIELDING STATIONS
STANDARD STATEMENT F **OBJECTIVE:** IDENTIFY AND APPLY GAME STRATEGIES TO BASIC GAMES AND PHYSICAL ACTIVITIES. • **PEER COMMUNICATION: REINFORCE** **BASIC CONCEPTS FOR STRIKING/FIELDING GAMES:** REINFORCE	• PEER/GROUP OBSERVATION • PEER COMMUNICATION CHECKLIST	

ENRICHMENT:	• THE STUDENTS WILL CREATE A JOURNAL OR LOG OF ACTIVITIES OUTSIDE OF SCHOOL THAT ARE LOCOMOTOR, NON LOCOMOTOR, AND MANIPULATIVE. • THE STUDENTS WILL WATCH A COLLEGE OR PROFESSSIONAL SPORTING EVENT AND LIST THE MOVEMENT SKILLS THAT WERE DEMONSTRATED. • ASSIST STUDENTS HAVNIG DIFFICULTUY WITH SKILLS/CONCEPTS
REMEDIATION:	• TASK CARDS SHOWING MOVEMENT SEQUENCES • TEACHER WORKING WITH THE STUDENT INDIVIDUALLY • PEER COACHING
RESOURCES:	*OBJECTS IN MOTION: PRINCIPLES OF CLASSICAL MECHANICS*, BY PAUL FLEISHER (2002), LERNER PUBLICATIONS COMPANY, MINNEAPOLIS, MI *CREATING RUBRICS FOR PHYSICAL EDUCATION,* BY JACALYN LUND, AAHPERD PUBLICATIONS (2000), OXON HILL, MD *PHYSICAL BEST ACTIVITY GUIDE, BY NASPE , HUMAN KINETICS (2005), CHAMPAIGN, IL* *PHYSICAL EDUCATION ASSESSMENT TOOLKIT,* BY LIZ GILES-BROWN, UNITED GRAPHICS (2006), CHAMPAIGN, IL *SPORTS AND FITNESS NUTRITION,* BY BARRY MILLER AND ROBERT WILDMAN, THOMASON AND WADSWORTH (2004) BELMONT, CA *ASSESSMENT STRATEGIES FOR ELEMENTARY PHYSICAL EDUCATION,* BY SUZANN SCHIEMER, VERSA PRESS (2000), CHAMPAIGN, IL PENNSYLVANIA DEPARTMENT OF EDUCATION STANDARDS ALIGNED SYSTEMS: HEALTH AND PHYSICAL EDUCATION

NAME:_____ **DATE:**_____

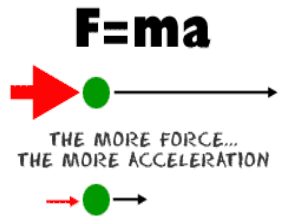
SCIENTIFIC PRINCIPLES ASSESSMENT GRADE 6
BENCHMARK ASSESSMENT 10.5.6.E

FILL IN THE BLANKS

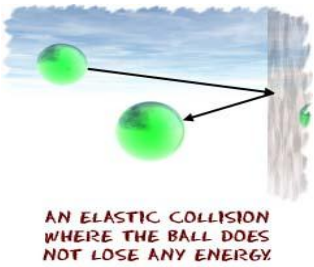
1. Sir Isaac Newton came up with the three laws of _____. (motion)
2. Strength and speed would be two examples of _____ _____ that affect the force the body can produce. (External factors)
3. The two types of balance are _____ & _____. (static, dynamic)
4. _____ is when an object or person is projected into the air. (flight)
5. There are _____ classes of levers. (three)
6. The three parts that make up a lever are _____, _____, and _____. (axis, resistance, force- acronym ARF)

MATCHING

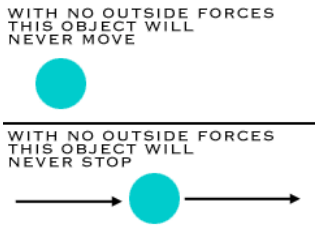
1. Law of Inertia



2. Law of Acceleration



3. Law of Action/Reaction



NAME:_____ **DATE:**_____

TEACHER OBSERVATION

STANDARD 10.5.6.E- TCHOUKBALL PSYCHOMOTOR ASSESSMENT

STUDENT NAME	OFFENSE: USING FORCE FOR SHOOTING	DEFENSE: PLACEMENT BASED ON ACTION/REACTION

RUBRIC

	EXCELLENT (RECEIVES STAR)	GOOD (RECEIVES CHECK)	NEEDS IMPROVEMENT (RECEIVES MINUS)	NOT EVIDENT (RECEIVES A QUESTION MARK)
OFFENSE	Analyze shot and amount of force needed to avoid defense, applies varying force- uses action /reaction to determine angle for shot.	Uses both principles but not consistently.	Uses force appropriately but angle needs more work. (or vice versa)	Student was not seen using this skill during game play.
DEFENSE	Analyze offensive positioning and force to position self for block.	Uses both principles but not consistently.	Analyzes force appropriately but angle needs more work. (or vice versa)	Student was not seen using this skill during game play.

NAME:_____ **DATE:**_____

Final Project

DIRECTIONS: We learned about Newton's three laws of motion while enjoying ourselves with (game). Now it is your turn. Choose one, two or three activities you really enjoy. You have to explain an example from that activity for each law.

You may use one activity to describe all three or you can pick a different activity for each law. It is completely up to you.

	EXCELLENT (4 - 5 PTS)	**GOOD (3 - 4 PTS)**	**NEEDS IMPROVEMENT (1-2 PTS)**
LAW OF INERTIA	Gave a detailed example of an activity that would demonstrate this law.	Gave a correct example for this law but explanation was not detailed.	Example did not provide an example for this law.
LAW OF ACCELERATION	Gave a detailed example of an activity that would demonstrate this law.	Gave a correct example for this law but explanation was not detailed.	Example did not provide an example for this law.
LAW OF ACTION /REACTION	Gave a detailed example of an activity that would demonstrate this law.	Gave a correct example for this law but explanation was not detailed.	Example did not provide an example for this law.
OVERALL	Project was creative, neat and easy to follow.	Project was neat and easy to follow.	Project did not show much effort.

FORM 7.9 **Fielding Games—Self-Assessment**

Name _____ **Date** _____

Directions: Assess yourself by shading in the learning line following each strategy that you use during _____.

1. I try to send the ball or object to the open spaces so that fielders have to move to stop it when I'm playing offense.

never | some of the time | most of the time

2. I maintain an athletic ready position and stay focused on the ball. I am never caught standing up or not paying attention when I'm playing defense.

never | some of the time | most of the time

3. I move to get in front of the ball or object when it is hit to my area when I'm playing defense.

never | some of the time | most of the time

4. I am ready and move to back up teammates when necessary when I'm playing defense.

never | some of the time | most of the time

From Physical Education Assessment Toolkit by Liz Giles-Brown, 2006, Champaign, IL: Human Kinetics.

COURSE	PHYSICAL EDUCATION	GRADE:	GRADE 6
STATE STANDARD:	10.5.6 CONCEPTS, PRINCIPLES AND STRATEGIES OF MOVEMENT	TIME FRAME:	
STANDARD STATEMENT:	E - IDENTIFY AND USE SCIENTIFIC PRINCIPLES THAT AFFECT BASIC MOVEMENT AND SKILLS USING APPROPRIATE VOCABULARY. F - IDENTIFY AND APPLY GAME STRATEGIES TO BASIC GAMES AND PHYSICAL ACTIVITIES.		

UNIT OF INSTRUCTION: TACTICAL GAMES

OBJECTIVES/ESSENTIAL CONTENT	ASSESSMENT	LEARNING ACTIVITIES
STANDARD STATEMENT E **OBJECTIVE:** IDENTIFY AND USE SCIENTIFIC PRINCIPLES THAT AFFECT BASIC MOVEMENT AND SKILLS USING APPROPRIATE VOCABULARY. • **DEFINE LEVERS:** LEVERS ARE DIVIDED INTO THREE CLASSES. CLASSIFICATION IS BASED ON HOW THE FORCE, RESISTANCE AND AXIS ARE POSITIONED ON THE LEVER IN RELATION TO EACH OTHER. ▪ *1ST CLASS LEVER:* THE AXIS IS BETWEEN THE RESISTANCE AND FORCE. (THINK OF A LEG PRESS MACHINE) ▪ *2ND CLASS LEVER:* THE RESISTANCE IS POSITIONED BETWEEN THE AXIS AND THE FORCE. (THINK OF A BENCH PRESS MACHINE.) ▪ *3RD CLASS LEVER*: THE FORCE IS POSITIONED BETWEEN THE AXIS AND RESISTANCE. (THINK OF BICEP CURL, WHERE THE AXIS IS THE ELBOW, FORCE IS TENSION OF MUSCLE IN BICEP, AND RESISTANCE IS THE DUMBBELL IN HAND.) • **REVIEW NEWTON'S LAWS OF MOTION:** ▪ *LAW OF INERTIA:* AN OBJECT IN MOTION CONTINUES IN MOTION AND AN OBJECT AT REST REMAINS AT REST UNLESS ACTED UPON BY A FORCE. ▪ *LAW OF ACCELERATION:* ACCELERATION OF AN OBJECT DEPENDS ON TWO THINGS: THE MASS OF AN OBJECT AND THE AMOUNT OF FORCE APPLIED. ○ *MORE FORCE :* GREATER ACCELERATION ○ *MORE MASS:* LESS ACCELERATION WITH EQUAL FORCE ○ *MASS:* AMOUNT OF MATTER OR SUBSTANCE AN OBJECT IS MADE OF ACCELERATION: ANY CHANGE IN MOTION OF AN OBJECT (SPEED OR DIRECTION) ▪ *LAW OF ACTION/REACTION:* FOR EVERY ACTION, THERE IS AN EQUAL AND OPPOSITE REACTION.	• PROJECT IDENTIFYING SCIENTIFIC PRINCIPLES TO ACTIVITY OF CHOICE. • TEACHER OBSERVATION • FITNESS PLAN LINKING IMPROVEMENT TO SCIENTIFIC PRINCIPLES.	• STRIKING/FIELDING • INVASION • NET/WALL • TARGET

	• **Review Application of force:** The amount of energy expended in a movement. ▪ Directly related to mass • **Review static and dynamic balance:** ▪ *Static balance:* Having no motion: bodies at rest or in equilibrium. ▪ *Dynamic balance:* requires movement. • **Review Flight:** Flight is when objects or person is projected in the air. Trajectory depends on their velocity (speed, direction), height and angle of release. (Think of a baseball player pitching a ball or someone throwing a javelin) **<u>STANDARD STATEMENT F</u>** **OBJECTIVE:** Identify And Apply Game Strategies To Basic Games And Physical Activities. • **Review Give and Go:** The give-and-go, often called pass-and-cut, is a basic offensive play in which a player simply passes (gives) to a teammate and cuts (goes) to the basket/goal, attempting to break free of his defender and expecting a return pass from their teammate. • **Review One on One:** One on one is a game strategy when one person defends another person. One on one is a defensive for guarding an opponent. • **Review Peer communication:** The ability to communicate verbally/nonverbally with your teammates.	• Identify the use of the game strategy/tactic: ▪ one on one ▪ give and go • Demonstrate the use of game strategies in three different activities. ▪ one on one ▪ give and go • Peer/group observation • Peer communication checklist	

ENRICHMENT:	
REMEDIATION:	
RESOURCES:	*Objects in Motion: Principles of Classical Mechanics*, by Paul Fleisher (2002), Lerner Publications Company, Minneapolis, MI Pennsylvania Department of Education Standards Aligned Systems: Health and Physical Education

COURSE	PHYSICAL EDUCATION	GRADE:	GRADE 6 BENCHMARK ASSESSMENT FOR STANDARD E-F
STATE STANDARD:	10.5.6 CONCEPTS, PRINCIPLES AND STRATEGIES OF MOVEMENT	TIME FRAME:	
STANDARD STATEMENT:	E - IDENTIFY AND USE SCIENTIFIC PRINCIPLES THAT AFFECT BASIC MOVEMENT AND SKILLS USING APPROPRIATE VOCABULARY. F - IDENTIFY AND APPLY GAME STRATEGIES TO BASIC GAMES AND PHYSICAL ACTIVITIES.		

UNIT OF INSTRUCTION: TARGET GAMES

OBJECTIVES/ESSENTIAL CONTENT	ASSESSMENT	LEARNING ACTIVITIES
STANDARD STATEMENT E **OBJECTIVE:** IDENTIFY AND USE SCIENTIFIC PRINCIPLES THAT AFFECT BASIC MOVEMENT AND SKILLS USING APPROPRIATE VOCABULARY. • **STATIC AND DYNAMIC BALANCE:** REINFORCE • **NEWTON'S LAWS OF MOTION:** REINFORCE • **APPLICATION OF FORCE:** REINFORCE • **LEVERS:** LEVERS ARE DIVIDED INTO THREE CLASSES. CLASSIFICATION IS BASED ON HOW THE FORCE, RESISTANCE AND AXIS ARE POSITIONED ON THE LEVER IN RELATION TO EACH OTHER. ▪ *1ST CLASS LEVER:* THE AXIS IS BETWEEN THE RESISTANCE AND FORCE. (THINK OF A LEG PRESS MACHINE) ▪ *2ND CLASS LEVER:* THE RESISTANCE IS POSITIONED BETWEEN THE AXIS AND THE FORCE. (THINK OF A BENCH PRESS MACHINE.) ▪ *3RD CLASS LEVER*: THE FORCE IS POSITIONED BETWEEN THE AXIS AND RESISTANCE. (THINK OF BICEP CURL, WHERE THE AXIS IS THE ELBOW, FORCE IS TENSION OF MUSCLE IN BICEP, AND RESISTANCE IS THE DUMBBELL IN HAND.)	• PROJECT IDENTIFYING SCIENTIFIC PRINCIPLES TO ACTIVITY OF CHOICE. • TEACHER OBSERVATION	• BOWLING • TARGET STATIONS
STANDARD STATEMENT F **OBJECTIVE:** IDENTIFY AND APPLY GAME STRATEGIES TO BASIC GAMES AND PHYSICAL ACTIVITIES. • **PEER COMMUNICATION:** REINFORCE **BASIC CONCEPTS FOR TARGET GAMES:** REINFORCE	• PEER/GROUP OBSERVATION • PEER COMMUNICATION CHECKLIST	

ENRICHMENT:	• THE STUDENTS WILL CREATE A JOURNAL OR LOG OF ACTIVITIES OUTSIDE OF SCHOOL THAT ARE LOCOMOTOR, NON LOCOMOTOR, AND MANIPULATIVE. • THE STUDENTS WILL WATCH A COLLEGE OR PROFESSSIONAL SPORTING EVENT AND LIST THE MOVEMENT SKILLS THAT WERE DEMONSTRATED. • ASSIST STUDENTS HAVNIG DIFFICULTUY WITH SKILLS/CONCEPTS
REMEDIATION:	• TASK CARDS SHOWING MOVEMENT SEQUENCES • TEACHER WORKING WITH THE STUDENT INDIVIDUALLY • PEER COACHING
RESOURCES:	*OBJECTS IN MOTION: PRINCIPLES OF CLASSICAL MECHANICS*, BY PAUL FLEISHER (2002), LERNER PUBLICATIONS COMPANY, MINNEAPOLIS, MI *CREATING RUBRICS FOR PHYSICAL EDUCATION,* BY JACALYN LUND, AAHPERD PUBLICATIONS (2000), OXON HILL, MD *PHYSICAL BEST ACTIVITY GUIDE, BY NASPE , HUMAN KINETICS (2005), CHAMPAIGN, IL* *PHYSICAL EDUCATION ASSESSMENT TOOLKIT,* BY LIZ GILES-BROWN, UNITED GRAPHICS (2006), CHAMPAIGN, IL *SPORTS AND FITNESS NUTRITION,* BY BARRY MILLER AND ROBERT WILDMAN, THOMASON AND WADSWORTH (2004) BELMONT, CA *ASSESSMENT STRATEGIES FOR ELEMENTARY PHYSICAL EDUCATION,* BY SUZANN SCHIEMER, VERSA PRESS (2000), CHAMPAIGN, IL PENNSYLVANIA DEPARTMENT OF EDUCATION STANDARDS ALIGNED SYSTEMS: HEALTH AND PHYSICAL EDUCATION

FORM 7.7 **Target Games—Self-Assessment**

Name _____ **Date** _____

Directions: Assess yourself by shading in the learning line following each strategy that you use during _____.

1. I am relaxed and able to stay focused on each attempt.

never | some of the time | most of the time

2. I do not rush through a shot. I take my time and concentrate on using my best skills.

never | some of the time | most of the time

3. I do not get upset with myself when I make a mistake. I assess the performance and attempt to make adjustments on the next trial.

never | some of the time | most of the time

FORM 7.7 **Target Games—Self-Assessment**

Name _____ **Date** _____

Directions: Assess yourself by shading in the learning line following each strategy that you use during _____.

1. I am relaxed and able to stay focused on each attempt.

never | some of the time | most of the time

2. I do not rush through a shot. I take my time and concentrate on using my best skills.

never | some of the time | most of the time

3. I do not get upset with myself when I make a mistake. I assess the performance and attempt to make adjustments on the next trial.

never | some of the time | most of the time

From Physical Education Assessment Toolkit by Liz Giles-Brown, 2006, Champaign, IL: Human Kinetics.

NAME:_____ **DATE:**_____

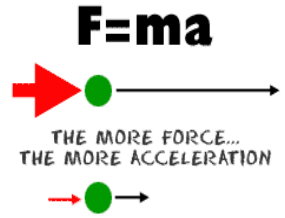
SCIENTIFIC PRINCIPLES ASSESSMENT GRADE 6
BENCHMARK ASSESSMENT 10.5.6.E

FILL IN THE BLANKS

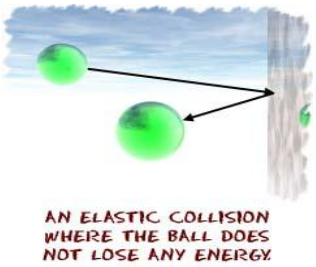
1. Sir Isaac Newton came up with the three laws of _____. (motion)
2. Strength and speed would be two examples of _____ _____ that affect the force the body can produce. (External factors)
3. The two types of balance are _____ & _____. (static, dynamic)
4. _____ is when an object or person is projected into the air. (flight)
5. There are _____ classes of levers. (three)
6. The three parts that make up a lever are _____, _____, and _____. (axis, resistance, force- acronym ARF)

MATCHING

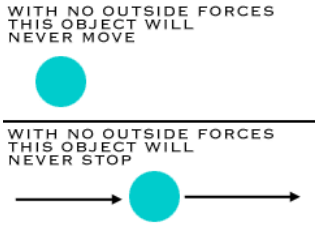
1. Law of Inertia



2. Law of Acceleration



3. Law of Action/Reaction



NAME:_____ **DATE:**_____

TEACHER OBSERVATION

STANDARD 10.5.6.E- TCHOUKBALL PSYCHOMOTOR ASSESSMENT

STUDENT NAME	OFFENSE: USING FORCE FOR SHOOTING	DEFENSE: PLACEMENT BASED ON ACTION/REACTION

RUBRIC

	EXCELLENT (RECEIVES STAR)	GOOD (RECEIVES CHECK)	NEEDS IMPROVEMENT (RECEIVES MINUS)	NOT EVIDENT (RECEIVES A QUESTION MARK)
OFFENSE	Analyze shot and amount of force needed to avoid defense, applies varying force- uses action /reaction to determine angle for shot.	Uses both principles but not consistently.	Uses force appropriately but angle needs more work. (or vice versa)	Student was not seen using this skill during game play.
DEFENSE	Analyze offensive positioning and force to position self for block.	Uses both principles but not consistently.	Analyzes force appropriately but angle needs more work. (or vice versa)	Student was not seen using this skill during game play.

NAME:_____ **DATE:**_____

Final Project

DIRECTIONS: We learned about Newton's three laws of motion while enjoying ourselves with (game). Now it is your turn. Choose one, two or three activities you really enjoy. You have to explain an example from that activity for each law.

You may use one activity to describe all three or you can pick a different activity for each law. It is completely up to you.

	EXCELLENT (4 - 5 PTS)	**GOOD (3 - 4 PTS)**	**NEEDS IMPROVEMENT (1-2 PTS)**
LAW OF INERTIA	Gave a detailed example of an activity that would demonstrate this law.	Gave a correct example for this law but explanation was not detailed.	Example did not provide an example for this law.
LAW OF ACCELERATION	Gave a detailed example of an activity that would demonstrate this law.	Gave a correct example for this law but explanation was not detailed.	Example did not provide an example for this law.
LAW OF ACTION /REACTION	Gave a detailed example of an activity that would demonstrate this law.	Gave a correct example for this law but explanation was not detailed.	Example did not provide an example for this law.
OVERALL	Project was creative, neat and easy to follow.	Project was neat and easy to follow.	Project did not show much effort.