# A Slippery Slope – Individual Work Scoring Sheet

Student Name: _____

> Place a score (1-4) in each row corresponding to the student's college readiness level.
> **Exceeding College Ready (4):** Substantially exceeds the performance expectations
> **College Ready (3):** Shows proficiency in all of the performance expectations
> **Approaching College Ready (2):** Meets only some of the performance expectations
> **Initiating College Ready (1):** Does not yet meet the performance expectations

| KEY COGNITIVE SKILLS | Student's Self-Assessment | Instructor's Score |
|---|---|---|
| **Intellectual Curiosity** (engages in scholarly inquiry and dialogue) | | |
| **Reasoning** (considers arguments, conclusions of self and others; constructs well-reasoned arguments to explain phenomena, validate conjectures, support positions; gathers evidence to support arguments, findings, reasoning; supports or modifies claims based on inquiry) | | |
| **Problem Solving** (identifies the problem to be solved; develops, applies multiple strategies to solve problems; collects evidence, data systematically, directly relates them to solving problem) | | |
| **Academic Behaviors** (self-monitors learning needs and seeks assistance when needed; uses good study habits; strives for accuracy and precision; perseveres to complete and master tasks) | | |
| **Work Habits** (works independently) | | |
| **Academic Integrity** (includes the ideas of others and the complexities of the debate, issue, or problem) | | |
| **FOUNDATIONAL SKILLS** | Student's Self-Assessment | Instructor's Score |
| **Writing Across the Curriculum** (writes clearly and coherently using standard writing conventions) | | |
| **Research Across the Curriculum** (synthesizes and organizes information effectively) | | |
| **Use of Data** (identifies patterns/departures among data; uses statistical, probabilistic skills for planning, collecting, analyzing, interpreting data; communicates findings in a variety of formats) | | |
| **Technology** (uses technology appropriately to organize, manage, and analyze information; uses technology to communicate, display findings in a clear and coherent manner) | | |
| **SCIENCE STANDARDS** | Student's Self-Assessment | Instructor's Score |
| **Nature of Science: Scientific Ways of Learning and Thinking** (uses cognitive skills; designs, conducts scientific investigations; uses collaborative, safe methods; demonstrates appropriate use of scientific equipment; conveys scientific info effectively) | | |
| **Foundational Skills: Scientific Applications of Mathematics** (understands basic math conventions, symbols, and relationships among maths; uses correct SI units, significant digits) | | |
| **Foundational Skills: Scientific Applications of Communication** (demonstrates appropriate reading and writing practices for science) | | |
| **Physics** (understands vectors, the fundamentals of kinematics, forces, potential energy, kinetic energy, and conservation of energy) | | |

**See reverse for comments.**

| Score | College Readiness Level |
|---|---|
| 49-56 | Exceeding College Ready |
| 41-48 | College Ready |
| 21-40 | Approaching College Ready |
| 0-20 | Initiating College Ready |

**Total Score:** _____    _____

**Grade:** _____

See Scoring Guide for grade conversion chart.

# C R A f T
**College Readiness Assignments for Texas**

Texas College and Career Readiness Initiatives
©2013 Texas Higher Education Coordinating Board. All rights reserved.

## A Slippery Slope – Group Work Scoring Sheet

Group Name(s): _____

Place a score (1-4) in each row corresponding to the student's college readiness level.
**Exceeding College Ready (4):** Substantially exceeds the performance expectations
**College Ready (3):** Shows proficiency in all of the performance expectations
**Approaching College Ready (2):** Meets only some of the performance expectations
**Initiating College Ready (1):** Does not yet meet the performance expectations

| KEY COGNITIVE SKILLS | Group's Assessment | Instructor's Score |
|---|---|---|
| **Reasoning** (constructs well-reasoned arguments to explain phenomena, validate conjectures, support positions; gathers evidence to support arguments, findings, reasoning; supports or modifies claims based on inquiry) | | |
| **Problem Solving** (analyzes the situation to identify the problem to be solved; develops and applies multiple strategies to solve problems) | | |
| **Work Habits** (works collaboratively) | | |
| **Academic Integrity** (includes the ideas of others and the complexities of the debate, issue, or problem) | | |
| **FOUNDATIONAL SKILLS** | Group's Assessment | Instructor's Score |
| **Research Across the Curriculum** (designs and presents an effective product) | | |
| **Use of Data** (identifies patterns and departures from patterns among data; uses statistical and probabilistic skills for planning, collecting, analyzing, interpreting data) | | |
| **Technology** (uses technology appropriately to gather information) | | |

| Score | College Readiness Level |
|---|---|
| 25-28 | Exceeding College Ready |
| 20-24 | College Ready |
| 11-19 | Approaching College Ready |
| 0-10 | Initiating College Ready |

**Total Score:** _____  _____

**Grade:** _____

See Scoring Guide for grade conversion chart.

**Comments:**

**C R A f T**
College Readiness Assignments for Texas

Texas College and Career Readiness Initiatives

# A Slippery Slope – Scoring Guide for Individual Work

*Note: The letters and numbers of the skills below refer to their designation
in the College and Career Readiness Standards.*

## KEY COGNITIVE SKILLS

### A. Intellectual Curiosity

### 1. Engage in scholarly inquiry and dialogue.

*College Ready Description:* Student engages fellow classmates in discussion, correcting their misconceptions as well as considering their reasoning and arguments.

*Evidence for Scoring:* Student attempts to answer questions informally posed by the instructor.

### B. Reasoning

### 1. Consider arguments and conclusions of self and others.

*College Ready Description:* Student listens attentively to fellow classmates' arguments, weighing what is presented against what they think.

*Evidence for Scoring:* Student is open to changing his or her views when unable to refute classmates' views and logic.

### 2. Construct well-reasoned arguments to explain phenomena, validate conjectures, or support positions.

*College Ready Description:* Student advances a logical solution clearly based on original thought and reflective of scientific facts, rather than opinions, regarding objects sliding on slopes. Student adequately supports, with valid observations and analyses, descriptions of all trends and patterns regarding sliding objects.

*Evidence for Scoring:* Student might propose that the sliding behavior for a given angle and surface is independent of mass. To support this, the student might point out from his or her past studies of projectile motion that an object in frictionless free fall behaves the same regardless of its mass. Student might observe that failing to handle the ice cubes properly could introduce mass error due to melting or that failing to completely and evenly dry the ramp following the ice cube trials could have unpredictable or unexpected results for the blocks of other materials.

### 3. Gather evidence to support arguments, findings, or lines of reasoning.

*College Ready Description:* Student uses relevant data to support descriptions of patterns in the sliding behavior.

*Evidence for Scoring:* Student cites data for high angles that indicate that the behavior may not be linear with respect to incline angle.

### 4. Support or modify claims based on the results of inquiry.

*College Ready Description:* Student systematically reviews and checks strategies and calculations throughout the report.

*Evidence for Scoring:* In graphing/calculating the dependence on angle, the student reviews and checks the calculations to be sure that it's not a linear mathematical relationship.

## C. Problem Solving

### 1. Analyze the situation to identify the problem to be solved.

*College Ready Description:* Student adequately applies previously learned knowledge to the analysis of the sliding motion of the object. Student's execution demonstrates full understanding of all elements of the assignment, including relevant givens and constraints.

*Evidence for Scoring:* Student's analysis of the sliding motion of any of the blocks along very high (i.e., vertical or near-vertical) angles are informed and related explicitly by the student to his or her studies of free fall (projectile motion). Student's report includes a description of how the ice was handled for minimal (or roughly quantifiable) mass variation, and it would also include observations and conjectures regarding the minimum slip angle for each block type.

### 2. Develop and apply multiple strategies to solve problems.

*College Ready Description:* Student uses an adequate range of appropriate methods, devices, techniques, and strategies to test for factors affecting the sliding.

*Evidence for Scoring:* Student's techniques include a nearly frictionless set of trials (with the ice cube), then a set of trials with a rather "sticky" (highly frictional) block.

### 3. Collect evidence and data systematically and directly relate to solving a problem.

*College Ready Description:* Student clearly describes the data collection procedure and explains how that data supports the modeling process. Student produces relevant charts, graphs, and/or diagrams accurately, including scale, labeling, units, and organization.

*Evidence for Scoring:* Student reports on the protocol used to ascertain the varying masses of the ice cube(s) used, and/or the student would document how the protocols differed for the non-ice materials, in particular how the angular data range narrowed due to the differing minimum slip angles of the other blocks. Student's data for slide times (or calculated acceleration or final speed values) might be graphed against the incline angle. The shape of this graph would be telltale—supportive of the accompanying regression analysis for best-fitting curve.

## D. Academic Behaviors

### 1. Self-monitor learning needs and seek assistance when needed.

*College Ready Description:* Student keeps a mindful eye on his or her integration of knowledge as it progresses and is able to ask fellow students and the instructor for help.

*Evidence for Scoring:* Student is comfortable admitting he or she does not know an answer and is willing to re-examine the material to relearn.

### 2. Use study habits necessary to manage academic pursuits and requirements.

*College Ready Description:* Student looks over the material he or she needs to incorporate and tries to come up with a logical approach to complete the task in the allotted time.

*Evidence for Scoring:* Student is able to pool the data that were generated in order to develop an equation to predict the motion of an object on a ramp.

### 3. Strive for accuracy and precision.

*College Ready Description:* Student carefully and correctly collects and reports experimental data throughout all stages of planning and execution.

*Evidence for Scoring:* Student includes all trial runs of each angle, mass or material variation—even those that were subsequently deemed outliers and not used in the final curve fitting.

### 4. Persevere to complete and master tasks.

*College Ready Description:* Student submits a report that reflects thorough understanding of each element of the task and meets all requirements of the assignment.

*Evidence for Scoring:* Student's report not only tabulates, graphs, and assesses curve fit of the analyses for each variable, it also documents the protocol and decision making that led to the ice cube tests. It also makes some kind of quantitative analysis of energy lost to friction.

## E. Work Habits

### 2. Work independently.

*College Ready Description:* Student can work though the problems by themselves.

*Evidence for Scoring:* Student does not wait until the group work to start thinking about the activity.

## F. Academic Integrity

### 3. Include the ideas of others and the complexities of the debate, issue, or problem.

*College Ready Description:* Student is able to evaluate and incorporate, if appropriate, the contributions of others to generate a more complete and coherent explanation to address the problem at hand.

*Evidence for Scoring:* When classmates share ideas after collecting data, student actively engages with other students' suggestions and attempts to incorporate the data into a coherent model.

## FOUNDATIONAL SKILLS

## B. Writing Across the Curriculum

### 1. Write clearly and coherently using standard writing conventions.

*College Ready Description:* Student uses appropriate terminology and data expression to communicate information in a concise manner. Student submits a report that has few or no errors in grammar, mechanics, punctuation, and spelling. Student uses relevant symbols, diagrams, graphs, and text to clearly communicate ideas.

*Evidence for Scoring:* Student makes proper use of the terms velocity vs. speed, force vs. energy, weight vs. mass, and acceleration vs. velocity. Student's line graphs would be key to showing visually the sorts of mathematical relationships that data analysis would reveal analytically. These two components should both appear in the presentation and report to best communicate the findings.

## C. Research Across the Curriculum

### 5. Synthesize and organize information effectively.

*College Ready Description:* Student collects and organizes experimental data in an orderly and strategic manner. Student effectively sequences the presentation of experimental data to support the final conclusion(s).

*Evidence for Scoring:* Student tabulates data for angle and mass values in one block for all four materials so that columnar variation could be as easily analyzed (across various materials) as row variation. Student reports data for each of the factors investigated separately (along with their graphs) prior to presentation of the regression implying the mathematical model so that the reader would almost surmise the model from the shape of the graph. The regression result would seem eminently plausible—almost necessary—when then derived.

## D. Use of Data

### 1. Identify patterns or departures from patterns among data.

*College Ready Description:* Student adequately identifies relevant trends in the graphs as well as outliers.

*Evidence for Scoring:* Student may note that angular variation produces variation in acceleration that appears nearly linear at low angles but not at higher angles.

### 2. Use statistical and probabilistic skills necessary for planning an investigation, and collecting, analyzing, and interpreting data.

*College Ready Description:* Student uses appropriate best-fit regression techniques and data ranges to quantify the relationships indicated in the slide data.

*Evidence for Scoring:* Student's regression may not reveal much in the first couple of angle trials (i.e., all may appear proportional or inversely proportional), but when the factor being studied is varied widely enough, the mathematical dependency becomes clearer, or for the mass variations, small experimental errors may imply some trend early on, whereas overall, the mass should reveal itself as being essentially irrelevant.

### 3. Present analyzed data and communicate finding in a variety of formats.

*College Ready Description:* Student composes a written report that adequately details experimental research and uses appropriate visuals and experimental results to clearly convey findings.

*Evidence for Scoring:* Student's report specifies which factor was being varied (and which others controlled), the degree of precision, the number of trials, and any outliers discarded, and each factor's independent effect on sliding acceleration would be graphed for best visual summary.

## E. Technology

### 2. Use technology to organize, manage and analyze information.

*College Ready Description:* Student utilizes technology to analyze the experimental data.

*Evidence for Scoring:* Student might use a spreadsheet to graph each factor's data and then to perform regression to determine the mathematical model best fitting that data.

**3. Use technology to communicate and display findings in a clear and coherent manner.**

*College Ready Description:* Student utilizes technology to effectively present information and data graphically, textually, and mathematically.

*Evidence for Scoring:* Student might use a spreadsheet for presenting the tables of data (with calculations) and a word processing program for the report/discussion itself.

**4. Use technology appropriately.**

*College Ready Description:* Student thoughtfully identifies when technology may not be necessary or appropriate to communicate findings.

*Evidence for Scoring:* Student might use a simple calculator to calculate the final speeds and the acceleration value for each trial, a spreadsheet to do best-fit calculations and to best present the graphical and analytical results/conclusions, and a word processor for the report/discussion itself.

## SCIENCE STANDARDS

## I. Nature of Science: Scientific Ways of Thinking and Learning

### A.2, 4. Cognitive skills in science.

*College Ready Description:* Student uses creativity and insight to recognize and describe patterns in natural phenomena. Student relies on reproducible observations of empirical evidence when constructing, analyzing, and evaluating explanations of natural events and processes.

*Evidence for Scoring:* Student critically thinks about the ideas that are being addressed and logically comes to a conclusion. Student does not blindly believe his or her fellow classmates claims but questions the validity of those claims.

### B.1. Scientific inquiry.

*College Ready Description:* Student designs and conducts scientific investigations in which hypotheses are formulated and tested.

*Evidence for Scoring:* Student uses an experimental procedure to collect data and formulate a theory. Student can create a formula to predict the behavior for an object of known material and mass sliding along a track of known length and incline angle.

### C.1, 3. Collaborative and safe working practices.

*College Ready Description:* Student collaborates on joint projects. Student demonstrates skill in the safe use of a wide variety of apparatuses, equipment, techniques, and procedures.

*Evidence for Scoring:* Student actively participates in the discussions with fellow classmates as well as the instructor. Student works in a team by brainstorming possible formulas for predicting the behavior of the sliding blocks.

### D.3. Current scientific technology.

*College Ready Description:* Student demonstrates appropriate use of a wide variety of apparatuses, equipment, techniques, and procedures for collecting quantitative and qualitative data.

*Evidence for Scoring:* Student uses lab equipment to experiment and collect data. Student uses a stopwatch to measure the amount of time it takes a block to slide down a ramp.

### E.1, 2. Effective communication of scientific information.

*College Ready Description:* Student uses several modes of expression to describe or characterize natural patterns and phenomena. These models of expression include narrative, numerical, graphical, pictorial, symbolic, and kinesthetic. Student uses essential vocabulary of the discipline being studied.

*Evidence for Scoring:* Student can converse with fellow classmates about the activity. Student provides a clear explanation of conservation of energy to their classmates, correctly using words like kinetic energy.

## II. Foundation Skills: Scientific Applications of Mathematics

### A.1, 3, 4, 5, 6, 7. Basic mathematics conventions.

*College Ready Description:* Student understands the real number system and its properties. Student understands ratios, proportions, percentages, and decimal fractions, and translates from any form to any other. Student uses proportional reasoning to solve problems. Student simplifies algebraic expressions. Student estimates results to evaluate whether a calculated result is reasonable. Student uses calculators, spreadsheets, computers, etc. in data analysis.

*Evidence for Scoring:* Student can rearrange equations to solve for useful quantities. Student can find an equation for the total energy of the system if given the initial potential and kinetic energies.

### B.1, 2. Mathematics as a symbolic language.

*College Ready Description:* Student carries out formal operations using standard algebraic symbols and formulae. Student represents natural events, processes, and relationships with algebraic expressions and algorithms.

*Evidence for Scoring:* Student solves for unknown variables in an algebraic equation. Student can calculate the final speed ($v_t$,) of the mass as it reaches the bottom of the incline.

### C.3, 4. Understand relationships among geometry, algebra, and trigonometry.

*College Ready Description:* Student understands basic geometric and trigonometric principles, including definitions of terms such as sine, cosine, tangent, cotangent, and their relationship to triangles.

*Evidence for Scoring:* Student uses trigonometric principles such a sin and cos to carry out algebraic calculations. Student understands, in mathematical terms, that the block moves only when the component of its weight along the plane is equal to the frictional force.

### F.1, 2. Scientific measurement.

*College Ready Description:* Student selects and uses appropriate Standard International (SI) units and prefixes to express measurements for real world problems. Student uses appropriate significant digits.

*Evidence for Scoring:* Student makes measurements with various devices and records the data with the correct number of significant digits. Student uses scales to measure masses and meter sticks to measure length.

## III. Foundation Skills: Scientific Applications of Communication

### A.1. Scientific writing.

*College Ready Description:* Student uses correct applications of writing practices in scientific communication.

*Evidence for Scoring:* Student presents their knowledge in the form of a report. And says in words what it means for an object to be speeding up (acceleration).

## B.2, 3. Scientific reading.

*College Ready Description:* Student sets up apparatuses, carries out procedures, and collects specified data from a given set of appropriate instructions. Student recognizes scientific and technical vocabulary in the field of study and uses this vocabulary to enhance clarity of communication.

*Evidence for Scoring:* Student can follow the instructions in the Student Notes for setting up the experiment.

# VIII. Physics

## B.1, 2, 3. Vectors.

*College Ready Description:* Student understands how vectors are used to represent physical quantities. Student demonstrates knowledge of vector mathematics using both a numerical representation and a graphical representation.

*Evidence for Scoring:* To motivate his or her use of equations, student may draw an object on an inclined plane and use vector mathematics to demonstrate that the object accelerates from the tangential component of the force of gravity.

## C.1, 2. Forces and motion.

*College Ready Description:* Student understands the fundamental concepts of kinematics. Student understands forces and Newton's law.

*Evidence for Scoring:* Student may relate the acceleration of the object to the force of gravity and the force of friction, both of which act on the object, using Newton's laws.

## D.1, 2. Mechanical energy.

*College Ready Description:* Student understands potential energy, kinetic energy, and conservation of energy.

*Evidence for Scoring:* Student may compare the observed motion of an object to the frictionless motion of that object, where the difference can be related to the amount of kinetic energy that was not conserved.

# A Slippery Slope – Scoring Guide for Group Work

*Note: The letters and numbers of the skills below refer to their designation in the College and Career Readiness Standards.*

## KEY COGNITIVE SKILLS

## B. Reasoning

### 2. Construct well-reasoned arguments to explain phenomena, validate conjectures, or support positions.

*College Ready Description:* Group demonstrates careful consideration of multiple key factors that could affect the sliding time/behavior.

*Evidence for Scoring:* Group members might observe that although certain objects' surfaces impede the sliding (i.e., slow the acceleration and final speed, and increase the time) more than others, increasing the angle reduces this difference between the various materials.

### 3. Gather evidence to support arguments, findings, or lines of reasoning.

*College Ready Description:* Group adequately evaluates evidence for quality and quantity.

*Evidence for Scoring:* Group members may observe one or more sliding trials where the motion was somehow irregular, and so they may note this trial for exclusion (as an outlier) from the subsequent mathematical analysis.

### 4. Support or modify claims based on the results of inquiry.

*College Ready Description:* Group refines original thinking and adjusts arrangements of elements based on thoughtful examination of properties, accurate graphing, and careful observations of trends and patterns.

*Evidence for Scoring:* Group members might have proposed/supposed initially that the increase in the incline angle is directly proportional to the observed acceleration, but after close analysis, the group might later conclude that this is not a linear (directly proportional) relationship.

## C. Problem Solving

### 1. Analyze the situation to identify the problem to be solved.

*College Ready Description:* Group dissects the problem into appropriate component parts that can be analyzed and solved separately. Group's execution demonstrates full understanding of all elements of the assignment, including relevant givens and constraints.

*Evidence for Scoring:* Group is methodical in varying the factors involved in sliding, keeping all other factors constant during each variation. Group's decision making includes a discussion/design for ensuring that the ice was handled for minimal (or roughly quantifiable) mass variation, and it would also include observations and conjectures regarding the minimum slip angle for each block type.

### 2. Develop and apply multiple strategies to solve problems.

*College Ready Description:* Group uses an adequate range of appropriate methods, devices, techniques, and strategies to test for factors affecting the sliding.

*Evidence for Scoring:* Group's techniques include a nearly frictionless set of trials (with the ice cube), then a set of trials with a rather "sticky" (highly frictional) block.

## E. Work Habits

### 2. Work collaboratively.

*College Ready Description:* Group communicates effectively, works efficiently, and utilizes the skills of all members to adequately investigate the behavior of blocks sliding on inclined planes.

*Evidence for Scoring:* Group's early discussions regarding strategies and protocols would include all members of the group, and the various tasks (such as measurement, recording, calculation/derivation, and spreadsheet preparation) would be distributed appropriately among the group members.

## F. Academic Integrity

### 3. Include the ideas of others and the complexities of the debate, issue, or problem.

*College Ready Description:* Group is able to evaluate and incorporate, if appropriate, the contributions of members to generate a more complete and coherent explanation to address the problem at hand.

*Evidence for Scoring:* When members share ideas after collecting data, group actively engages with the suggestions and attempts to incorporate the data into a coherent model.

# FOUNDATIONAL SKILLS

## C. Research Across the Curriculum

### 6. Design and present an effective product.

*College Ready Description:* Group follows all specifications of the assignment.

*Evidence for Scoring:* Group begins with the initial planning, as directed, devising protocols, etc., then conducts those investigations. They analyze the results (both graphically and statistically), propose a mathematical model accounting for the effects of the factors, and propose a quantification of energy loss.

## D. Use of Data

### 1. Identify patterns or departures from patterns among data.

*College Ready Description:* Group adequately identifies relevant trends in the graphs as well as outliers.

*Evidence for Scoring:* Group members may note that angular variation produces variation in acceleration that appears nearly linear at low angles but not at higher angles.

### 2. Use statistical and probabilistic skills necessary for planning an investigation, and collecting, analyzing, and interpreting data.

*College Ready Description:* Group uses appropriate best-fit regression techniques and data ranges to quantify the relationships indicated in the slide data.

*Evidence for Scoring:* Group's regression may not reveal much in the first couple of angle trials (i.e., all may appear proportional or inversely proportional), but when the factor being studied is varied widely enough, the mathematical dependency becomes clearer.

## E. Technology

**1. Use technology to gather information.**

*College Ready Description:* Group uses appropriate devices to accurately measure physical properties.

*Evidence for Scoring:* Group's angle measurement of the ramp for each trial uses one sturdily mounted protractor (not a handheld measurement), and accomplishes the release of the block in each trial using the same device (e.g., release of a pincer or blockade mechanism).

# A Slippery Slope – Scoring Instructions

There are two scoring sheets for this CRA: one for individual work and one for group work. Use either or both as desired for your class.

Place a score (1-4) in each row of the scoring sheet corresponding to the student's college readiness level.

**Exceeding College Ready (4):** Substantially exceeds the performance expectations
**College Ready (3):** Shows proficiency in all of the performance expectations
**Approaching College Ready (2):** Meets only some of the performance expectations
**Initiating College Ready (1):** Does not yet meet the performance expectations

Suggested Grade Conversion:

This chart reflects equal weight given to each skill. As key cognitive skills, foundational skills, and discipline content knowledge are all important elements of college readiness, we recommend this grading approach. However, you may certainly choose to implement different weights to particular scales and assign a grade at your discretion.

Individual Work:

| Score | Grade | | Score | Grade | | Score | Grade | | Score | Grade |
|-------|-------|---|-------|-------|---|-------|-------|---|-------|-------|
| 56 | 100 | | 45 | 89 | | 34 | 78.5 | | 23 | 72 |
| 55 | 99.5 | | 44 | 88 | | 33 | 78 | | 22 | 71 |
| 54 | 99 | | 43 | 87 | | 32 | 77.5 | | 21 | 70 |
| 53 | 98.5 | | 42 | 86 | | 31 | 77 | | 20 | 68 |
| 52 | 98 | | 41 | 85 | | 30 | 76.5 | | 19 | 66 |
| 51 | 97 | | 40 | 84 | | 29 | 76 | | 18 | 64 |
| 50 | 96 | | 39 | 83 | | 28 | 75 | | 17 | 62 |
| 49 | 95 | | 38 | 82 | | 27 | 74.5 | | 16 | 60 |
| 48 | 94 | | 37 | 81 | | 26 | 74 | | | |
| 47 | 92 | | 36 | 80 | | 25 | 73.5 | | | |
| 46 | 90 | | 35 | 79 | | 24 | 73 | | | |

Group Work:

| Score | Grade | | Score | Grade | | Score | Grade | | Score | Grade |
|-------|-------|---|-------|-------|---|-------|-------|---|-------|-------|
| 28 | 100 | | 22 | 88 | | 16 | 78 | | 10 | 67 |
| 27 | 99 | | 21 | 85 | | 15 | 77 | | 9 | 65 |
| 26 | 97 | | 20 | 84 | | 14 | 75 | | 8 | 63 |
| 25 | 95 | | 19 | 82 | | 13 | 73 | | 7 | 60 |
| 24 | 94 | | 18 | 80 | | 12 | 71 | | | |
| 23 | 91 | | 17 | 79 | | 11 | 70 | | | |

C R A f T
College Readiness Assignments for Texas

Texas College and Career Readiness Initiatives