All About Scoring

Task Tracker allows teachers to create assignments (referred to as *tasks*) from our website activities. Each assignment has a number of properties associated with it. Many of these properties have to do with scoring. When you create a task, you have to identify the scoring rules that Task Tracker uses to automatically score your students' work. While we suggest that beginning Task Tracker users keep the scoring rules simple, the fact remains that Task Tracker allows for a multitude of scoring possibilities. As your Task Tracker skills improve, you will probably wish to experiment with some of these different scoring set-ups. In this document, we will address scoring considerations and the variety of set-ups that teachers can set for their assignments. We end with eight different example scoring scenarios.

Concept Builders and Science Reasoning Center Activities

The screenshot below shows the various scoring parameters for a Concept Builder task. A Science Reasoning Center task will show the same set up.

Total Points:		**Total point VALUE of task**
Minimum Activities To Complete:*	3	**# of activities required**
Completion Points:*	0	**Students must complete ALL the required activities to earn these points**
Always Count Activity Points	☑	

These are the "Activity Points"

Max Bonus Activities Allowed

Points Per Bonus Activity Completed

Bonus: Beyond what is required.

Specific activities that are required (if checked)

Task Activities

Actions	Name	Description	Required	Point Value
🗑	Apprentice Level	Identify velocity–time graphs which represent a stated motion characteristic. Includes 4 Questions with 3 graphs given for each question.	☐	0
🗑	Master Level	Identify velocity–time graphs which represent a stated motion characteristic. Includes 8 Questions with 3 graphs given for each question.	☐	0
🗑	Wizard Level	Identify velocity–time graphs which represent a stated motion characteristic. Includes 8 Questions with 3-4 graphs given for each question.	☐	0

Total Points indicate the total point value of an assignment. You can set up an assignment such that the students can earn more than the Total Points (as in extra credit; a score greater than 100%). The points students earn come from three sources – **Activity Points**, **Completion Points**, and **Bonus Points**.

Activity Points are the points earned for completing parts or activities of the task. For Concept Builders, there are usually three parts (though some have two, four, or five). In the screenshot, the activities or parts are Apprentice Level, Master Level, and Wizard Level. Entering point values into the Point Value fields allows you to designate points to these activities. If Always Count Activity Points is checked, Task Tracker will always add the point values listed in these fields when determining the student scores.

Completion Points are points earned for completing ALL the requirements of the task. You can indicate how many parts or activities are required in the Minimum Activities to Complete. The default value is all the activities. You can also indicate which of the Activities are required in the Task Activities section by checking the **Required** box(es). You cannot check more boxes than the **Minimum Activities to Complete** value. If students complete all the required activities, they will receive the **Completion Points**. These are all or nothing points. So if you require three activities and students only complete two, they will not receive any completion points. The only points they can receive when completing less than the requirements are the **Activity Points** shown in the **Task Activities** section.

The total points earned by students is the sum of the Activity Points, the Completion Points, and the **Bonus Points**. Bonus points can be earned when students complete more than the required number of activities. But for a student to be elgible for Bonus Points, a teacher must enter a value (other than 0) into the **Max. Bonus Activities Allowed** field. Teachers will also have to enter a value into the **Points Per Bonus Activity Completed** field in order for **Bonus Points** to be awarded.

Finally, any of the parts or activities of a task can be removed from scoring consideration. By tapping the Trash can next to the activity in the Task Activities section, that activity will not be considered in the scoring of the assignment.

Minds On Physics and Concept Checkers
Our Minds On Physics and Concept Checkers are considerably easier to set up. There are no Bonus Points in a MOP mission or Concept Checker. The fundamental rule is that …

Total Points = Completion Points + Activity Points

By designating a value for the **Total Points** (for example, 10 points) and a value for the **Completion Points** (let's use 2 points in this example, the **Activity Points** are determined as …

Activity Points = Total Points – Completion Points
Using our example numbers: Activity Points = 10 pts – 2 pts = 8 pts

The "Activities" are simply the Question Groups of the task. So students earn **Activity Points** by answering the questions correctly. Each Question Group is of equal value. So the point value of a single Question Group is automatically calculated as the **Activity Points** divided by the number of Question Groups. Using our example numbers and assuming the MOP mission has 10 Question Groups, then each Question Group is worth 0.8 points. In general,

Point value of a QG = (Total Points – Completion Points) / # of QGs

In Minds On Physics and Concept Checkers, a Question Group can be removed from the student experience by tapping on the trash can in the **Task Activities** section. Doing so reduces the value of the denominator (# of QGs) in the above equation.

The **Completion Points** can be set to any value between 0 and the **Total Points** value. In Minds On Physics and Concept Checkers, students earn **Completion Points** only if they correctly answer all the Question Groups that are used in the assignment. **Completion Points** are "all or nothing points." For this reason, we suggest using them with caution.

Total Points: ← **Total point VALUE of task**

Tap to Remove

Health Penalty:

50

20 = 20% Reduction in Health per wrong answer.
ALTERING WILL ERASE ALL PARTIALLY COMPLETED STUDENT PROGRESSES. All who finish will still have complete.

Completion Points:*

0   ← **Students must correctly answer ALL the Question Groups to earn these points**

Activity Points = Total Points - Completion Points (spread equally among all Question Groups)

Task Activities

Actions	Name	Description
🗑	Question Group 1	Multiple Choice: Match a simple "oil drop diagram" to a description of the motion.
🗑	Question Group 2	Multiple Select: Given "oil drop diagrams" for two cars, evaluate comparative statements regarding their v and a
🗑	Question Group 3	Multiple Choice: Match a given "oil drop diagram" to the proper description of the motion
🗑	Question Group 4	Multiple Choice: Match a given "oil drop diagram" to the proper description of the motion
🗑	Question Group 5	Multiple Choice: Given a simple "oil drop diagram" identify the direction (if any) of the v and a vectors
🗑	Question Group 6	Multiple Choice: Given a simple "oil drop diagram" identify the direction (if any) of the v and a vectors
🗑	Question Group 7	Multiple Choice: Given a simple "oil drop diagram" identify the direction (if any) of the v and a vectors
🗑	Question Group 8	Multiple Choice: Given a simple "oil drop diagram" identify the direction (if any) of the v and a vectors
🗑	Question Group 9	Multiple Choice: Given a simple "oil drop diagram" identify the direction (if any) of the v and a vectors

Calculator Pad
Information about the scoring of Calculator Pad tasks is discussed in detail in our document titled **Configuring Scoring and Attempts on a CalcPad Assignment**.

Concept Building Scoring Scenarios and Set-ups
The following scenarios illustrate how the power of Task Tracker scoring rules can be harnessed to create assignments with unique scoring rules. The values of the various scoring parameters are identified. A "--" indicates that it doesn't matter what value you use.

Scenario #1 – The Simplest Scenario (Recommended for Beginners)

Total Points = 12

Min. Activities to Complete = 3

Completion Points = 0

Always Count Act. Points = --

Max. Bonus Activities = --

Pts/Bonus Activity = --

Activity Points:
1st Activity = Required, 4 pts
2nd Activity = Required, 4 pts
3rd Activity = Required, 4 pts

Description
Students earn credit for completion of each of the three activity parts. Students' scores will be either 0/12, 4/12, 8/12, or 12/12, depending on how many activities they complete.

Scenario #2 – All or Nothing Scenario (Use with caution)

Total Points = 10

Min. Activities to Complete = 3

Completion Points = 10

Always Count Act. Points = --

Max. Bonus Activities = --

Pts/Bonus Activity = --

Activity Points:
1st Activity = Required, 0 points
2nd Activity = Required, 0 points
3rd Activity = Required, 0 points

Description
Students must complete all three activities in order to earn the 10 points on the assignment. If they fail to complete all three activities, then they will earn 0 points. Students' scores will be either 0/10 or 10/10, depending on whether or not they complete all three activities or less than three activities.

Scenario #3 – Simple But Unequal Weighting of Activity Points

Total Points = 12

Min. Activities to Complete = 3

Completion Points = 0

Always Count Act. Points = --

Max. Bonus Activities = --

Pts/Bonus Activity = --

Activity Points:
1st Activity = Required, 5 points
2nd Activity = Required, 4 points
3rd Activity = Required, 3 points

Description
Students earn credit for completion of each of the three activity parts. Students' scores will be either 0/12, 3/12, 4/12, 5/12, 7/12, 8/12, 9/12, or 12/12, depending on how many and which activities they complete.

Scenario #4 – Reliance on Activity Points; Students Pick Activities

Total Points = 12

Min. Activities to Complete = 2

Completion Points = 0

Always Count Act. Points = Not checked

Max. Bonus Activities = 0

Pts/Bonus Activity = --

Activity Points:
1st Activity = Not Required, 6 points
2nd Activity = Not Required, 6 points
3rd Activity = Not Required, 6 points

Description
Students earn credit for completion of any two of the three activity parts. Doing a third activity will not earn any points. Students' scores will be either 0/12, 6/12, or 12/12, depending on whether they complete 0, 1, or 2 activities.

Scenario #5 – Reliance on Activity Points; Bonus Points Available

Total Points = 12

Min. Activities to Complete = 2

Completion Points = 0

Always Count Act. Points = Checked

Max. Bonus Activities = 1

Pts/Bonus Activity = 0

Activity Points:
1st Activity = Not Required, 6 points
2nd Activity = Not Required, 6 points
3rd Activity = Not Required, 2 points

Description
Students earn credit for completion of any of the three activities. Doing the first and second activities would earn students full credit. If they do the third activity, they will earn 2 additional points. Students' scores will either be 0/12, 2/12, 8/12, 12/12, or 14/12, depending on how many and which activities they complete.

Scenario #6 – Do 1 Activity for Full Credit and Additional Activities for Bonus Credit

Total Points = 10

Min. Activities to Complete = 1

Completion Points = 10

Always Count Act. Points = Not Checked

Max. Bonus Activities = 2

Pts/Bonus Activity = 1

Activity Points:
1st Activity = Not Required, 0 Points
2nd Activity = Not Required, 0 Points
3rd Activity = Not Required, 0 Points

Description
Students must complete one of the activities to earn any credit at all. They can select any one of the three activities. They will receive Bonus Points cor completing additional activities. Students' scores will be either 0/10, 10/10, 11/10, or 12/10 depending on how many activities they complete.

Scenario #7 – Blending Completion Points and Activity Points

Total Points = 10

Min. Activities to Complete = 1

Completion Points = 8

Always Count Act. Points = Checked

Max. Bonus Activities = --

Pts/Bonus Activity = --

Activity Points:
1st Activity = Required, 0 pts
2nd Activity = Not Required, 2 pts
3rd Activity = Not Required, 2 pts

Description
Students must complete the first activity to earn the 8 completion points. Students can add 2 activity points for completing each of the second and the third activities Students' scores will be either 0/10, 2/10, 4/10, 8/10, 10/10, or 12/10 depending on how many activities they complete.

Scenario #8 – Similar to Above with Blending … but Completion of First Activity = 90%

Total Points = 10

Min. Activities to Complete = 1

Completion Points = 8

Always Count Act. Points = Checked

Max. Bonus Activities = --

Pts/Bonus Activity = --

Activity Points:
1st Activity = Required, 1 pt
2nd Activity = Not Required, 1 pt
3rd Activity = Not Required, 1 pt

Description
Students must complete the first activity to earn the 8 completion points; they will also earn 1 activity point. Students can add 1 additional activity point for completing each of the second and the third activities. Students' scores will be either 0/10,1/10,2/10, 9/10, 10/10, or 11/10 depending on how many activities they complete.