# **Creating a Minds On Physics Assignment**

Before assigning a Minds On Physics mission to your classes, take the time to peruse the Minds On Physics section. You will notice that missions are organized under a topic like Kinematic Concepts, Newton's Laws or Static Electricity. When you select a topic, you will see a listing of the available missions, their corresponding objectives, and a link to the actual mission page. The name and the objectives may be enough to provide you with a feel for the nature of the mission. But launching the mission and taking the time to do it will provide an even better feel.

## Mission KC1: Scalars and Vectors

### Objectives

- The student should understand the distinction between a vector and a scalar.
- The student should be able to identify basic quantities which are vectors and scalars.

An alternative method (perhaps an even better method) is to log into your teacher account and visit the **Teacher Resources** section. You will find a link to this section on your **Account** page and near the bottom of the left-side navigation column under Task Tracker. Once on the **Teacher Resources** page, tap on the **Preview MOP Missions** link. Select your topic and tap on the mission link. You will be able to quickly navigate through all the questions of the mission and view their



organization into Question Groups. For more details about the Teacher Preview function and how to make the best use of it, view our directions page titled **Previewing and Customizing Missions** in the Minds On Physics section of the website.

As you preview missions with the intent of creating an assignment, think in terms of ...

## Class ... Topic ... Task ... Task Properties

These four terms represent the decisions you will make as you create the task. They also represent the navigation system that we have built into task creation within Task Tracker. Ask the following questions as you preview Minds On Physics content:

- Which Class will I assign this mission to?
- What is the **Topic** that the mission falls under?
- What is the abbreviation and name that defines this Task? (like Mission KC1)
- And what **Properties** do I want this assigned task to have? (this includes due dates, late dates and penalties, helpful notes for students to read, point value of assignment and partial credit rules, and customization features like the Health Penalty and deleted Question Groups).

Think about these questions as you preview a mission.

### **Directions:**

- 1. From your Account page, navigate to your Classes screen.
- Open the class you wish to create the assignment for by tapping on the View (●) icon. When your class opens, you will see sections titled Class Features (like Minds On Physics or Concept Builders), Topics, and Students (which includes a roster of your currently active students).
- 3. Assignments are always organized by topic. A topic would be one of the 15 module names listed in the Minds On Class Physics Internet Modules section of Below are a list of Students which you can control, and Subscription Types that have been created for you our website. For instance, Course Features If your topic is not listed, then Below are a list of Course Features that Kinematic Concepts is a topic. create it with this button. Name Kinematic Graphing, Newton's Minds on Physics Laws, and Vectors and Projectiles Topics are examples of other topics. The Here are your curre ask topics. You can view the topic to manage the tasks and see student progress. topics for which you currently have existing assignments are listed in No tasks exist yet. Current Subscription Capacity: 7/200 student spots filled (193 remain). the **Topics** area of your **Classes** Students page. Open an existing topic by Click the View icon to see the student's current progress and edit Deadlines. Points, and Statuses for them, tapping on the View (<sup>()</sup>) icon for Add Student Export Detailed Progress Export Simple Progress Mass Transfer Students No students found that were assigned to this course. that topic or tap on the Create New



- If creating a new topic, you will be presented the Add New Topic window. Select the desired topic from the Topic drop-down menu an tap on Submit. Once created, the Tasks page for that topic will open.
- The Tasks page lists the currently assigned tasks (MOP missions) organized under the currently selected Topic. You can open a task by tapping on it. Or if you don't see the task, you can create it by tapping on the Create New Task button. Either

# action opens the Task Properties window. The **Task Properties** window is perhaps the most important window to become familiar with. It is shown below. The graphic describes the various parts of the window. The **Visible by Date** is the date at which the assignment becomes visible on students' assignment board. If left blank, it becomes immediately visible. We would suggest you pick a date, even if is **Now**. If you ever clone a class for next year's subscription, we will forward all dates ahead by one year; we need a date to

### Add New Topic

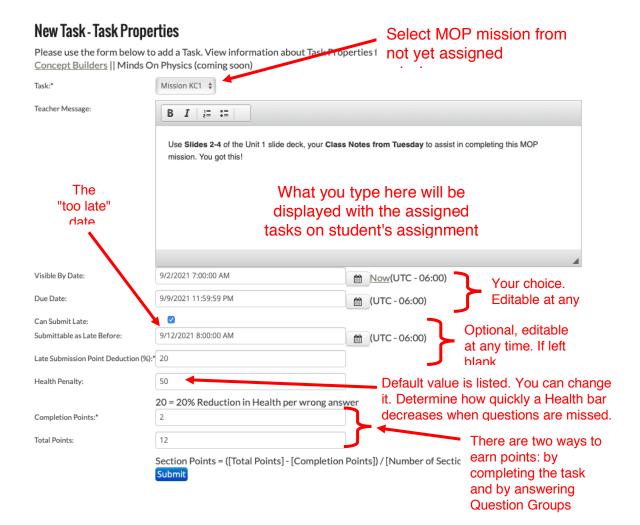
Topic

Select a new Topic to add to your class.

Subscription Type:\* Minds on Physics \$

~	Minds on Physics - Circular Motion and Gravitation Minds on Physics - Electric Circuits
	Minds on Physics - Forces in 2-Dimensions
	Minds on Physics - Kinematic Concepts
	Minds on Physics - Kinematic Graphing
	Minds on Physics - Light Waves and Color
	Minds on Physics - Momentum and Collisions
	Minds on Physics - Newton's Laws
	Minds on Physics - Reflection and Mirrors
	Minds on Physics - Refraction and Lenses
	Minds on Physics - Sound and Music
	Minds on Physics - Static Electricity
	Minds on Physics - Vectors and Projectiles
	Minds on Physics - Wave Motion
	Minds on Physics - Work and Energy

do that. When the Can Submit Late box is checked, you have the option to identify a last date at which the assignment can be submitted - the Submittable as Late Before field. If left blank, then that date is the end of the course. You can also enter a Late **Penalty**. The **Health Penalty** is a percent value that is deducted from the student's Health Bar for every missed question. The default value is listed when you create the task. You can change it if you like. (See our page Previewing and Customizing Missions for more details. The link is on the Task Tracker Directions page of our Minds On Physics section.) The Total Points field is the point value of the assignment. Students can earn these points in one of two ways. Completion Points are points rewarded if students complete the mission. Making all the **Total Points** completion points will make the assignment an all-or-nothing assignment. Students who complete 7 of the 8 Question Groups will get 0 points on the assignment. Of course, they could choose to do it again since there is never a penalty for a second, third, fourth ... attempt. The partial credit points are simply the difference between the Total Points field and the **Completion Points** field. So if a 10 point assignment has 2 points designated towards completion, the remaining 8 points are partial credit points awarded for the best score achieved on the mission. These 8 points will be divided equally among the Question Groups. So if there are 8 Question Groups and the students best attempt resulted in 6 of the 8 being completed, then 6 partial credit points would be rewarded for the assignment and 0 points for Completion. The assignment score would be 6/10.



Once the Task Properties data are submitted (it might take some time), tap on the **Back to Task** button to view the **Task** page for your selected mission. The Task page (shown below) lists the **Task Activities**. These are the Question Groups. Tapping the trash can next to a Question Group will discard it from the mission; that is, that Question Group will not be presented to students. If you wish to *recover* a discarded Question Group, you can select it and add it back in using the **Add Additional Activities** pull-down menu.

Here are the current Activities for this Task.   Actions Name   Image: Complex C	Description
Question Group 1	
Question Group 2	Use trash can to discard a Question
Question Group 3	Group. Discarded groups appear in the Add Additional Activities pull-
Question Group 4	down menu. You can add these
Question Group 6	groups back into the assignment using this menu.
Question Group 5 + Add	
Navigate To: Select sibling task + Select course	Quickly navigate to other assigned MOP missions.
Quick View Activity View Full View	Rosters/Scores shown here.

Assigned tasks can be edited by tapping on the **Edit** icon ( $\square$ ) next to the Task Name on the **Topics** page. There is a certain risk associated with editing a task once students have started it. If a student is in the middle of a mission at the time of edit, it can cause unexpected results. It's good to do your editing before students start or after the task is no longer active.

### Recommended Reading: **Previewing and Customizing Missions**

The Health Bar, Health Penalty, Learning, Frustration, and Mental Health