

## *H5P Training Series:*

# Memory Game

In this tutorial, you will learn how to create an H5P Memory Game. Before beginning this tutorial, please download the zipped file that accompanies it from ctYOU.org. You will need to use these additional files to complete this tutorial.

**IMPORTANT:** Be sure to abide by copyright laws when developing learning activities based on content you do not own. See the link under the Additional Resources section for information.

**Note:** Before uploading images to your H5P activity, save them as JPG or PNG files at 72 dpi using RGB color, and then size them appropriately for viewing on a computer monitor.

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## 1. Overview of the Memory Game Content Type

The H5P Memory Game content type allows you to create your own matching games meant to test the memory of your learners. It is possible to match identical images or two different images with this content type.

**IMPORTANT:** Before creating any H5P element, turn on editing for your course site. Under the section or topic where the H5P element is to appear, click the **Add an activity** dropdown menu and choose **Interactive Content** from the list. Save your work periodically, and try out the features as you create them to help you understand how they function.

**Note:** See tutorial **0—General H5P Settings** for instructions on how to set up H5P activities for grades and other information.

## 2. Pairing Identical Images

The following steps walk you through the process of adding a Memory Game that has seven pairs of matching images. The steps also explain how to add text, and media links within this content type.

Step	Action	Notes
1.	In the <b>Name</b> field, type in a name for the H5P interaction.	For training purposes, type: Memory Game 1.
2.	In the <b>Editor</b> section, select <b>Memory Game</b> from the list of content types. When selecting this H5P activity for the first time, click the <b>Use</b> button.	The Memory Game editor should appear.
3.	Click <b>+ Add</b> under <b>Image</b> to upload your photo.	For training purposes, navigate to where you saved the files for this tutorial and <b>Open</b> apples.png
4.	Click <b>Edit image</b> to edit the photo, if necessary.	For training, skip this step.
5.	Click <b>Edit copyright</b> to add copyright information, if necessary.	Because the images we use for training are in the public domain, there is no need to enter copyright information at this time.
6.	Type a brief, concise description of the image in the <b>Alternative text for Image</b> field.	For training purposes, type: apples.
7.	In the upper left corner of the field, click on <b>2. Card</b> to add a second card to the memory game.	
8.	Click <b>+ Add</b> under <b>Image</b> to upload your photo.	For training purposes, navigate to where you saved the files for this tutorial and <b>Open</b> bananas.png
9.	Click <b>Edit image</b> to edit the photo, if necessary.	For training, skip this step.
10.	Click <b>Edit copyright</b> to add copyright information, if necessary.	Because the images we use for training are in the public domain, there is no need to enter copyright information at this time.
11.	Type a brief, concise description of the image in the <b>Alternative text for Image</b> field.	For training purposes, type: bananas.
12.	Click on <b>+ ADD CARD</b> to add a third card to the memory game.	

Step	Action	Notes
13.	Click <b>+ Add</b> under <b>Image</b> to upload your photo.	For training purposes, navigate to where you saved the files for this tutorial and <b>Open</b> grapes.png
14.	Click <b>Edit image</b> to edit the photo, if necessary.	For training, skip this step.
15.	Click <b>Edit copyright</b> to add copyright information, if necessary.	Because the images we use for training are in the public domain, there is no need to enter copyright information at this time.
16.	Type a brief, concise description of the image in the <b>Alternative text for Image</b> field.	For training purposes, type: grapes.
17.	Click on <b>+ ADD CARD</b> to add a fourth card to the memory game.	
18.	Click <b>+ Add</b> under <b>Image</b> to upload your photo.	For training purposes, navigate to where you saved the files for this tutorial and <b>Open</b> peaches.png
19.	Click <b>Edit image</b> to edit the photo, if necessary.	For training, skip this step.
20.	Click <b>Edit copyright</b> to add copyright information, if necessary.	Because the images we use for training are in the public domain, there is no need to enter copyright information at this time.
21.	Type a brief, concise description of the image in the <b>Alternative text for Image</b> field.	For training purposes, type: peaches.
22.	Click on <b>+ ADD CARD</b> to add a fifth card to the memory game.	
23.	Click <b>+ Add</b> under <b>Image</b> to upload your photo.	For training purposes, navigate to where you saved the files for this tutorial and <b>Open</b> pears.png
24.	Click <b>Edit image</b> to edit the photo, if necessary.	For training, skip this step.
25.	Click <b>Edit copyright</b> to add copyright information, if necessary.	Because the images we use for training are in the public domain, there is no need to enter copyright information at this time.
26.	Type a brief, concise description of the image in the <b>Alternative text for Image</b> field.	For training purposes, type: pears.

Step	Action	Notes
27.	Click on <b>+ ADD CARD</b> to add a sixth card to the memory game.	
28.	Click <b>+ Add</b> under <b>Image</b> to upload your photo.	For training purposes, navigate to where you saved the files for this tutorial and <b>Open</b> tangerines.png
29.	Click <b>Edit image</b> to edit the photo, if necessary.	For training, skip this step.
30.	Click <b>Edit copyright</b> to add copyright information, if necessary.	Because the images we use for training are in the public domain, there is no need to enter copyright information at this time.
31.	Type a brief, concise description of the image in the <b>Alternative text for Image</b> field.	For training purposes, type: tangerines.
32.	Click on <b>+ ADD CARD</b> to add a seventh card to the memory game.	
33.	Click <b>+ Add</b> under <b>Image</b> to upload your photo.	For training purposes, navigate to where you saved the files for this tutorial and <b>Open</b> lemons.png
34.	Click <b>Edit image</b> to edit the photo, if necessary.	For training, skip this step.
35.	Click <b>Edit copyright</b> to add copyright information, if necessary.	Because the images we use for training are in the public domain, there is no need to enter copyright information at this time.
36.	Type a brief, concise description of the image in the <b>Alternative text for Image</b> field.	For training purposes, type: lemons.
37.	After adding all the cards in the deck, click to expand the other settings for the memory game. Adjust the <b>Behavior settings</b> , <b>Look and feel</b> , and <b>Text overrides and translations</b> , as desired.	For training purposes, click the <b>Behavioral Settings</b> link, and <b>uncheck</b> the <b>Position the cards in a square box</b> .
38.	Click <b>Save and display</b> at the bottom of the screen when finished editing your memory game.	This step applies when using H5P content in a Moodle server, such as ctYOU.org. Saving may be different in other applications.

### 3. Paring Non-Identical Images

As previously mentioned, you can pair two different images with the Memory Game content type. Matching two different images creates a more robust learning game. For example, learners can match terms to their definitions or an image to a description. This second exercise also uses images with a higher resolution than the previous Memory Game.

The following instructions explain how to match two images that are not the same.

Step	Action	Notes
1.	In the <b>Name</b> field, type in a name for the H5P interaction.	For training purposes, type: Memory Game 2.
2.	In the <b>Editor</b> section, select <b>Memory Game</b> from the list of content types.	The Memory Game editor should appear.
3.	For Card 1, click <b>+ Add</b> under <b>Image</b> to upload your photo.	For training purposes, navigate to where you saved the files for this tutorial and <b>Open</b> avacados.png
4.	Click <b>Edit image</b> to edit the photo, if necessary.	For training, skip this step.
5.	Click <b>Edit copyright</b> to add copyright information, if necessary.	Because the images we use for training are in the public domain, there is no need to enter copyright information at this time.
6.	Type a brief, concise description of the image in the <b>Alternative text for Image</b> field.	For training purposes, type: avacados.
7.	Under the <b>Matching Image</b> heading, click the <b>+Add</b> button.	For this exercise, navigate to where you saved the files for this tutorial and <b>Open</b> avacados-term.png
8.	Type a brief, concise description of the image in the <b>Alternative text for Matching Image</b> field.	For training purposes, type: aguacates.
9.	In the upper left corner of the field, click on <b>2. Card</b> to add a second card to the memory game.	
10.	Click <b>+ Add</b> under <b>Image</b> to upload your photo.	For training purposes, navigate to where you saved the files for this tutorial and <b>Open</b> carrots.png

Step	Action	Notes
11.	Click <b>Edit image</b> to edit the photo, if necessary.	For training, skip this step.
12.	Click <b>Edit copyright</b> to add copyright information, if necessary.	Because the images we use for training are in the public domain, there is no need to enter copyright information at this time.
13.	Type a brief, concise description of the image in the <b>Alternative text for Image</b> field.	For training purposes, type: carrots.
14.	Under the <b>Matching Image</b> heading, click the <b>+Add</b> button.	For this exercise, navigate to where you saved the files for this tutorial and <b>Open</b> carrots-term.png
15.	Type a brief, concise description of the image in the <b>Alternative text for Matching Image</b> field.	For training purposes, type: zanahorias.
16.	Click on <b>+ ADD CARD</b> to add a third card to the memory game.	
17.	Click <b>+ Add</b> under <b>Image</b> to upload your photo.	For training purposes, navigate to where you saved the files for this tutorial and <b>Open</b> tomatoes.png
18.	Click <b>Edit image</b> to edit the photo, if necessary.	For training, skip this step.
19.	Click <b>Edit copyright</b> to add copyright information, if necessary.	Because the images we use for training are in the public domain, there is no need to enter copyright information at this time.
20.	Type a brief, concise description of the image in the <b>Alternative text for Image</b> field.	For training purposes, type: tomatoes.
21.	Under the <b>Matching Image</b> heading, click the <b>+Add</b> button.	For this exercise, navigate to where you saved the files for this tutorial and <b>Open</b> tomatoes-term.png
22.	Type a brief, concise description of the image in the <b>Alternative text for Matching Image</b> field.	For training purposes, type: tomates. (Please note the Spanish spelling.)
23.	After adding all the cards in the deck, click to expand the other settings for the memory game. Adjust the <b>Behavior settings</b> , <b>Look and feel</b> , and <b>Text overrides and translations</b> , as desired.	For training purposes, click the <b>Behavioral Settings</b> link, and <b>check</b> the <b>Position the cards in a square box</b> .

Step	Action	Notes
24.	Click <b>Save and display</b> at the bottom of the screen when finished editing your memory game.	This step applies when using H5P content in a Moodle server, such as ctYOU.org. Saving may be different in other applications.

**Note:** Notice how the second Memory Game displays differently than the first Memory Game. When checked, the **Position the cards in a square** option (under **Behavioral settings**) sizes the cards to fit the space allowed on the computer screen. For this reason, use larger image files when using this setting. For these examples, the images for Memory Game 1 are approximately 2×2 inches 72 dpi, while the images for Memory Game 2 are 4×4 inches at 72 dpi.

**IMPORTANT:** Be sure to test all of the multimedia elements you created for this tutorial. Once completed, you can use this H5P feature as a standalone, embed its iframe code in a webpage, or you can download it for use in another courses.

## 4. Additional Resources

To learn more about this topic, visit:

- <https://h5p.org/memory-game>
- <https://h5p.org/documentation/content-author-guide/tutorials-for-authors/memory-game>
- <http://www.loc.gov/teachers/usingprimarysources/copyright.html>

### Accessibility Requirements:

If you have included audio or video in this activity, visit the websites below for general information about accessibility requirements. See tutorial **12—Interactive Video** for a sample storyboard.

- <http://www.w3.org/2008/06/video-notes>
- <http://www.w3.org/WAI/intro/wcag>
- <https://www.digitalgov.gov/2013/06/26/making-multimedia-section-508-compliant-and-accessible/>

***The Oklahoma Department of CareerTech offers many other free H5P tutorials, as well as an extensive series on how to use various Moodle plugins. Look for them on ctYOU.org.***