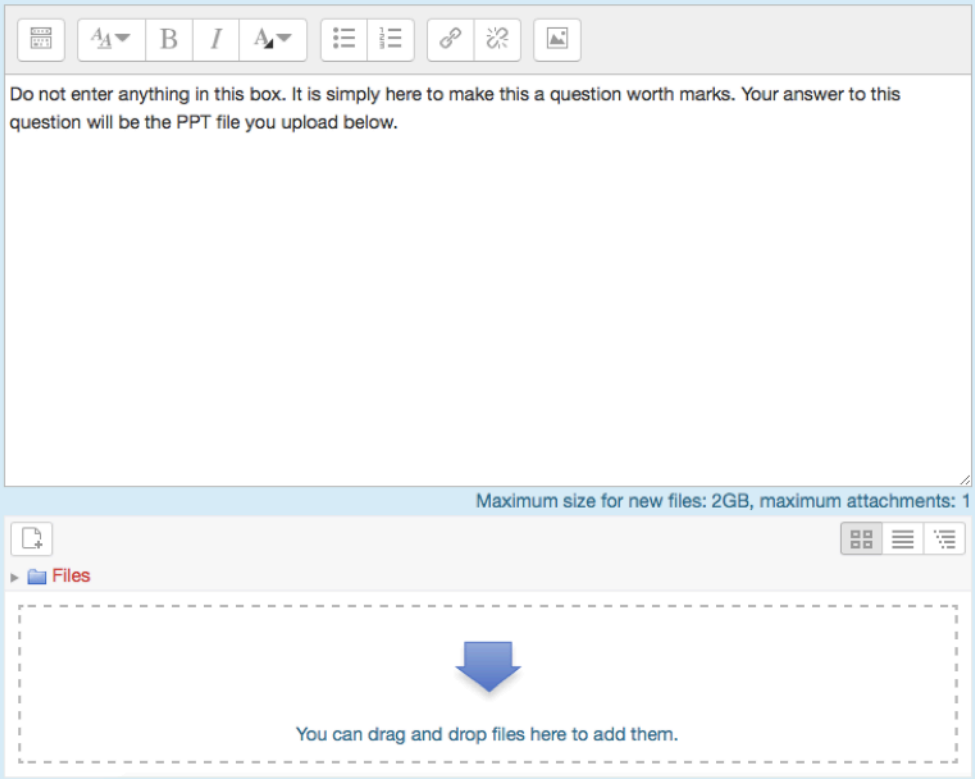
Part A: Nucleic Acids

You will need to use the associated PPT file (Class 2 Nucleic Acid Activity) to answer this question. If you haven't yet opened it, go back to the Moodle main page and download the PPT file under the link for this activity.

This question relates to the first page (or slide) of the PPT file. The next two slides are for extra credit; do these at the end if you have time.

Rename the file with your group number in front of the title (e.g. 3-Class 2 Nucleic Acid Activity if you are group 3). Save the file, and drag it into the upload box below.



How do nucleotides link together to form the nucleic acid backbone? Describe the process in the box below, and name and describe the type of bond that is formed.

How do the nitrogenous bases of the nucleotides link to each other? Name and describe the type of bond that is formed.

Why can purines only bond with pyrimidines (and vice versa), but neither can bond with their own type?

More specifically, why can purine A only bind with pyrimidine T, and not with pyrimidine C (or the same for any of the other specific bonds)? Hint: Look at how the bonds line up between A and T, and then look at how they would line up between A and C.

Extra Questions

Only attempt these questions once you have completed everything else.

Nucleic Acids

For this question you will need the PPT file with nucleic acid images.

The second slide from the PPT file displays the components of the four nucleotides found in DNA. Rearrange the images to construct and label the four nucleotides.

The third slide from the PPT file displays the four nucleotides. Arrange them so that they are attached together and form a small nucleic acid strand.

If you haven't done so already, rename the file with your group number in front of the title (e.g. 3-Class 2 Nucleic Acid Activity if you are group 3). Save the file with your modifications to the second and third slides, and drag it into the upload box below.

Do not enter anything in this box. It is simply here to make this a question worth marks. Your answer to this question will be the PPT file you upload below.

Maximum size for new files: 2GB, maximum attachments: 1

Files

You can drag and drop files here to add them.