



Big Bang Biodiversity Game

Worksheet – rules of the game

Rules

1. **You** can choose any habitat from the drop downs for the 5 blank spaces shown – with labels in black text rather than white text.


More information about the habitats can be found on pages 2 and 3 of this worksheet, which should help you work out which combinations score higher than others.

2. **You** must choose one square to be the Building Site () ,
For that square, the habitat after building must match the habitat that was there before.

3. **You** must end up with at least 2 Wheat Crop fields.

Bonus Points

1. **Chalk Grassland:** If you can get 3 squares in a row for Chalk Grassland, you get an **extra 5 points** - you have **connected** areas of **high biodiversity** habitat which is good

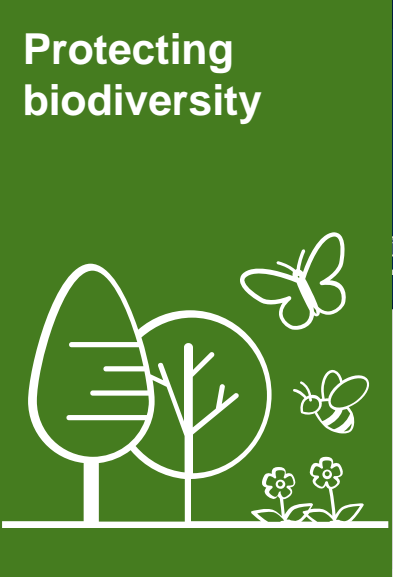
2. **Enhance square:** You can choose 1 square to leave as it's original habitat, and enhance it to make it more **distinctive** and better **condition**. It scores **double points for that square** but must be the same habitat as before to avoid losing habitat ().

3. **Farmer Bonus:** The farmer would like fields that are easy to harvest and are connected together. If you have 2 Wheat Crop fields next to each other, you get an **extra 2 points**

Note: Your Enhance square can't be the same as your Building Site square



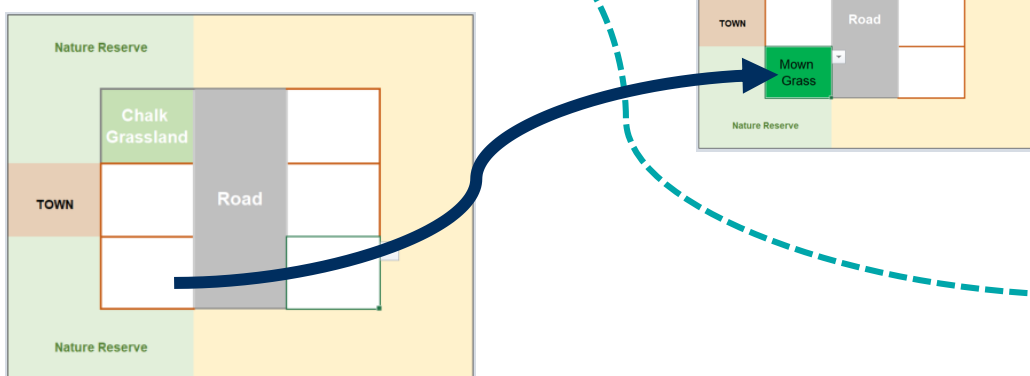
If you have any error messages, your calculations do not count, and you need to problem solve to fix the error.



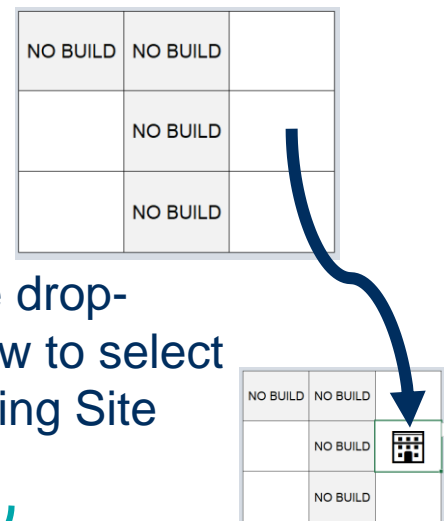
Big Bang Biodiversity Game

Worksheet – how it works

1. Use the drop-down arrows to select habitats for each of the 5 squares



2. Use the drop-down arrow to select your Building Site square

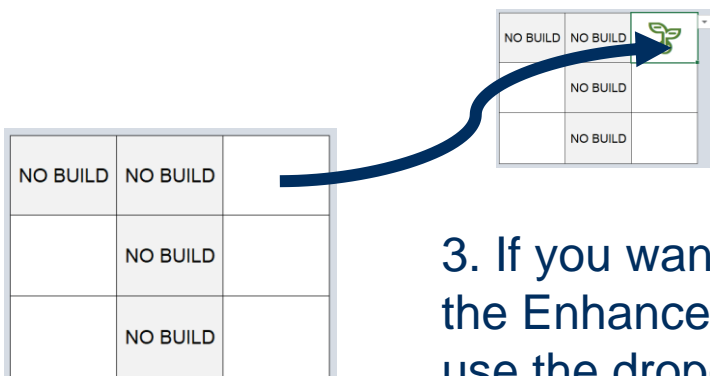


Tactics

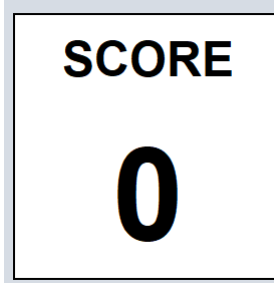
Can you work out how to get the highest score?

Habitat	Points at the beginning or if left alone	Points if lost and then created again
Mown Grass	2	1
Chalk Grassland	6	4
Wheat Crop	2	2
Mixed Scrub	5	5

3. If you want to go for the Enhance Bonus, use the drop-down arrow to select your Enhance square



5. See how high a score you can achieve in 10 minutes!



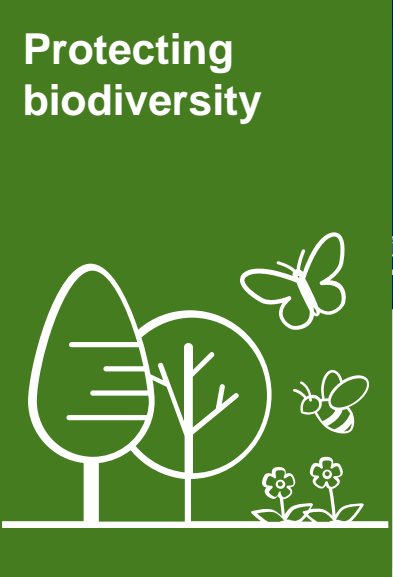
MESSAGES

Error the compound square must have the same habitat type as the baseline

Error - you can only add enhancement bonus if you have not changed the habitat

Error not enough wheat crop fields

4. Make sure you have no error messages – problem solve to fix any errors



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Worksheet – habitat top trumps

Chalk Grassland

Distinctiveness: High
Connectivity: High if two areas of nature reserve can be linked together, otherwise Medium
Condition: Good (baseline) Moderate (created)

Where is it found?
 On chalk soils (alkali soils)

How is it managed?
 With sympathetic grazing – it needs to be gently grazed or mown at certain times of year to allow the wildflowers to flower and set seed.

Biggest positive: Rare and special habitat that is great for bees and other important species.

Biggest negative: Very tricky habitat that needs careful management and takes a long time to mature.

Mown Grass

Distinctiveness: Low
Connectivity: Low – it is difficult for most species to cross this habitat
Condition: Moderate (baseline) Poor (created)

Where is it found?
 Anywhere – playing fields, gardens etc

How is it managed?
 Frequent mowing, with or without people collecting the clippings. Some mown grass also is managed with pesticides and fertilisers.

Biggest positive: Great for playing sports, picnics, dog walking and easy, though expensive, to manage.

Biggest negative: Doesn't support anything except fairly tough grasses, and not very good for Biodiversity

Wheat Crop

Distinctiveness: Low
Connectivity: Low – it is difficult for most species to cross this habitat
Condition: Poor (baseline) Poor (created)

Where is it found?
 On rich soils, on cultivated / ploughed land

How is it managed?
 Ploughing, fertilisers, seed planting every year, pesticides, and then harvested at the end of the summer. Some fields have multiple crops each year.

Biggest positive: Produces food, and some important birds species make their homes among the crops. Also replanted every year, so it quickly regains its value.

Biggest negative: Doesn't support many species.

Mixed Scrub

Distinctiveness: Medium
Connectivity: Medium – hedgerows can be good connectors
Condition: Good (baseline) Good (created)

Where is it found?
 You can get big areas of scrub, or can be lines of hedge

How is it managed?
 A combination of grazing, pruning, planting, coppicing, creating clearings etc

Biggest positive: Can support lots of different species, and grows quickly so regains its value very well.

Biggest negative: If you lose your football or kite in an area of mixed scrub, you are probably going to find a lot of thorns in your way to get it back.