

**TASK**

Responsive Web Design

**Model-Answer Approach**

[](http://www.hyperiondev.com/portal/)

# Auto-graded task

CSS Grid is used to create a periodic table, as it allows an efficient method of creating all the rows and columns required for this periodic table. CSS Flexbox can also be used; however, with Flexbox there may be additional HTML required, therefore, CSS Grid would be the preferred option for this particular use case.

Responsive units such as **REM** and **EM** are used, as these units were created with responsiveness in mind. The REM unit is used for font sizes, because using REM units allows you to scale elements relative to the base font, ensuring the design looks good on various screens. For margins and padding, the EM unit is used, which enables proportional scaling based on an element's current font size.

Shorthands, such as grid-template, are used to create the grid instead of grid-template-columns and grid-template-rows, as well as grid-column instead of grid-column-start and grid-column-end. Implementing these shorthands means fewer lines of CSS and can improve the readability of the CSS.

Comments are used in the CSS to indicate the different sections of the webpage that are being styled. In the HTML, there are also comments to assist a reader of the code in finding the various sections of the periodic table. In the file structure of the project, there is a directory created for images, as this is a good practice to keep your code organised, especially as a project scales.

There are no errors in the HTML or CSS syntax when checking the HTML and CSS using the W3C HTML and CSS validators.

It may be tricky to find an efficient method to create the whitespace in the periodic table, but CSS Grid allows one to ‘stretch’ an HTML element, like a **div**, over several columns and rows in the grid, thereby creating the whitespace required. To ensure the content in each container or div does not flow outside of the container, the CSS overflow property is set to **hidden** and the text-overflow property is also used to display an ellipsis when certain text in the container overflows. To obtain the different colours of the periodic table elements, go to "Inspect", then "Elements" and select the "Styles" tab to see the various styles implemented on a webpage. Alternatively, a colour-picker tool, such as [**https://imagecolorpicker.com/**](https://imagecolorpicker.com/), could also be used.