

Interactivity – changing size of an image (Method 1 – Inline)

Inline JavaScript can be used to increase and decrease the size of a graphic, as a mouse pointer passes over and out of a graphic.

Example Code:

```

```



<https://marrcomputing.co.uk/higher/wdd/pennyfalls/HTML/home.html>

Interactivity – changing size of an image (Method 2 - Function)

JavaScript functions may be called to increase and decrease the size of a graphic, as a mouse pointer passes over and out of a graphic.,

```

```

The JavaScript functions above are passed the parameter **this**, referring to the element containing the event displayLarger(this).

```
<script>  
function displayLarger(my_image)  
{my_image.style.width='150px';  
my_image.style.height='150px';}
```

The JavaScript functions are placed within a <script> tag within the <head> section of a HTML document.

```
function displaySmaller(my_image)  
{my_image.style.width='100px';  
my_image.style.height='100px';}  
</script>
```



<https://marrcomputing.co.uk/higher/wdd/pennyfalls/HTML/home.html>

Interactivity – changing size of an image (Method 2 - Function)

Implementing example 2 as a function, allows the same code to be called from multiple events:

```



```

Creating a rollover image (sports page): (Method 1 – Inline)

Rollover images can be created using two JavaScript events.

The first event (onmouseover) displays an alternate graphic when the mouse passes over the image element.

The second event (onmouseout) displays the original graphic when the mouse pointer leaves the image.

The following is the view in browser when the mouse pointer is not over any image:



This can be implemented using the inline JavaScript shown below:

```

```

The action `src= ' '` points the image element towards a given address.

The following is the view in browser when mouse passes over the right-hand image:



<https://marrcomputing.co.uk/higher/wdd/pennyfalls/HTML/sport.html>

Creating a rollover image (sports page): (Method 2 - Function)

A rollover image can also be achieved using two functions.

The first function is called using onmouseover.

The second is called using onmouseout. Each function is passed the img element as a parameter using this. As before each function changes the src of the image:

The following is the view in browser when the mouse pointer is not over any image:



The following is the view in browser when mouse passes over the right-hand image:



HTML

```

```

JavaScript

```
<script>
function displaySport1A(my_image)
{my_image.src='../images/netball.jpg';}
function displaySport1B(my_image)
{my_image.src='../images/football.jpg';}
</script>
```

<https://marrcomputing.co.uk/higher/wdd/pennyfalls/HTML/sport.html>

Highlighting text by dynamically changing its colour

(home page):

Text may be highlighted by changing its style when the mouse pointer passes over the element containing the text

The example below highlights a paragraph element dark red, by using an onmouseover event:

```
<p onmouseover="this.style.color='darkRed'">  
  
Wednesday 12th June.<br> The Computing ... Room B9.  
</p>
```

Hover
anywhere in
paragraph



Wednesday 12th June.

The Scottish Schools Cup match against Footie HS has been postponed until 13th July so please do not turn up on Saturday morning. The team sheet for the rearranged match will be posted on the P.E. notice board two days before the rearranged date.

<https://marrcomputing.co.uk/higher/wdd/pennyfalls/HTML/home.html>

Highlighting text by dynamically changing its colour

(home page):

To implement an action on a different page element, an id is required to identify the element the action will be performed on

An element is identified using `document.getElementById('')`

The example below highlights the paragraph text when the mouse passes over the image contained in the paragraph:

```
<p id="highlight"><b>Thursday 13th June.</b><br> The guidance ...
... suits them. </p>
```

Hover
over icon



Thursday 13th June.

The guidance team will be running a 'study skills' seminar for all S4 to S6 pupils after school on Thursday 20th June. The purpose of this course is to help students find a method of study that suits them.

<https://marrcomputing.co.uk/higher/wdd/pennyfalls/HTML/study.html>

Revealing an element using onclick (study quiz page):

When a web page loads, elements may be initially hidden by applying the CSS declaration `display:none`.

This can be implemented using an inline or internal style, or by implementing an external style (using a class, as shown below):

CSS

```
.hidden{display:none}
```

The graphic element in the example (reveal.png) contains an onclick event that uses the paragraph element's id to execute the action 'display=block' on the paragraph. The result of this action is that the paragraph becomes visible on the page.

HTML

```
<p> Q1 - Do you make notes or draw diagrams when studying? </p>

<p id="reveall" class="hidden"> Research shows that a very small
percentage of people memorise knowledge simply by reading it. Most
people learn more effectively when they write something out in their
own words or produce graphical representations of the knowledge such
as mind-maps.</p>
```

The following is the view in browser when page loads:

How healthy are your study practices?

Read each of the statements below and think how it applies to you. When you have considered your answer click reveal.

Q1 - Do you make notes or draw diagrams when studying?

Reveal

Q2 - What is the last activity you do before sleep?

The following is the view in browser after 'Reveal' has been clicked:

How healthy are your study practices?

Read each of the statements below and think how it applies to you. When you have considered your answer click reveal.

Q1 - Do you make notes or draw diagrams when studying?

Reveal

Research shows that a very small percentage of people memorise knowledge simply by reading it. Most people learn more effectively when they write something out in their own words or produce graphical representations of the knowledge such as mind-maps.

Q2 - What is the last activity you do before sleep?

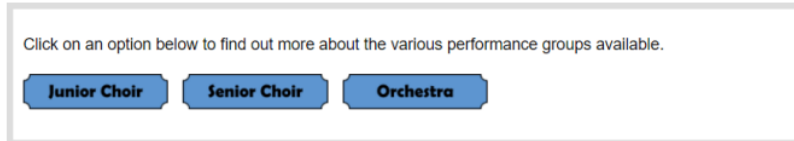
paragraph appears

<https://marrcomputing.co.uk/higher/wdd/pennyfalls/HTML/studyQuiz.html>

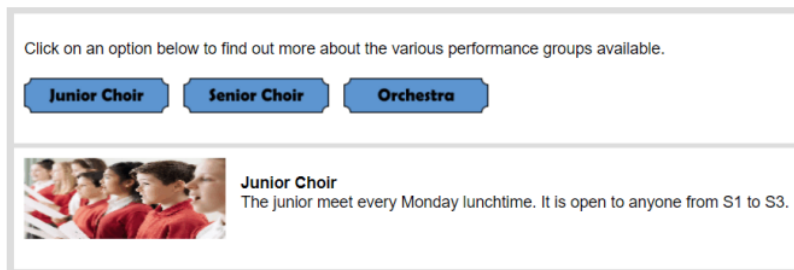
Revealing one of three hidden elements using onclick (music page):

Image elements, with associated onclick events, can be used to offer users a choice of what they view on a web page. Each onclick event is used to reveal a hidden element containing a graphic and text relating to each option.

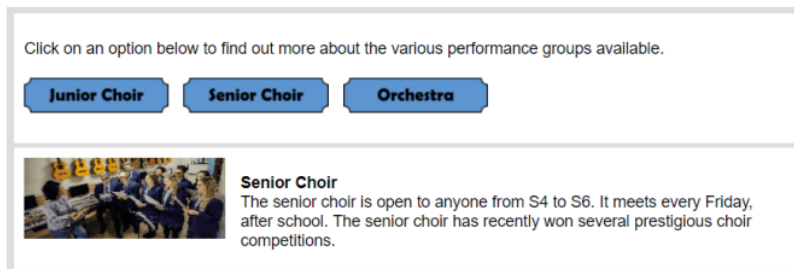
The following is the view in browser when page loads:



The following is the view in browser when the 'Junior Choir' graphic is then clicked.



The following is the view in browser when the 'Senior Choir' button is then clicked.



Each onclick event calls a function:

```
<p> Click on an option below to find out more about the  
various performance groups available. <br><br>  
  
  
  
</p>
```

Revealing one of three hidden elements using onclick (music page):

Image elements, with associated onclick events, can be used to offer users a choice of what they view on a web page. Each onclick event is used to reveal a hidden element containing a graphic and text relating to each option.

The three section elements, containing the graphic and text to be revealed, are each identified by an `id` and initially hidden using `display:none`.

```
<section id="junior" style="display:none">

<p><b>Junior Choir</b><br>The junior meet every Monday
lunchtime. It is open to anyone from S1 to S3.</p>
</section>
<section id="senior" style="display:none">

<p><b>Senior Choir</b><br>The senior choir is open to anyone
from S4 to S6. It meets every Friday, after school. The
senior choir has recently won several prestigious choir
competitions.</p>
</section>
<section id="orchestra" style="display:none">

<p><b>Orchestra</b><br>The orchestra is not age limited,
instead being open to anyone who plays their instrument at
grade 3 level or higher.</p>
</section>
```

Each of the three JavaScript functions called by the onclick event reveals one of the three `<section>` elements and hides the other two using three `style.display` actions:

```
<script>
function displayJC() {
    document.getElementById("junior").style.display="block";
    document.getElementById("senior").style.display="none";
    document.getElementById("orchestra").style.display="none";
}

function displaySC() {
    document.getElementById("junior").style.display="none";
    document.getElementById("senior").style.display="block";
    document.getElementById("orchestra").style.display="none";
}

function displayO() {
    document.getElementById("junior").style.display="none";
    document.getElementById("senior").style.display="none";
    document.getElementById("orchestra").style.display="block";
}
</script>
```