# Difference Between DOMContentLoaded and Load Events

## Explanation

The difference between `DOMContentLoaded` and `load` events lies in when they are triggered during the page loading process and what they signify:

### 1. DOMContentLoaded Event

- \*\*When it Fires\*\*:  
 - The `DOMContentLoaded` event is fired when the DOM is fully loaded and parsed, meaning that the basic structure of the HTML document (elements, attributes, etc.) is ready for manipulation via JavaScript.  
 - It does not wait for external resources like images, stylesheets, or subframes to load.

- \*\*Use Case\*\*:  
 - Use this event when you want to interact with or manipulate the DOM as soon as it is available, without waiting for other resources.

- \*\*Example\*\*:  
```javascript  
document.addEventListener("DOMContentLoaded", () => {  
 console.log("The DOM is ready for JavaScript interactions.");  
});  
```

### 2. Load Event

- \*\*When it Fires\*\*:  
 - The `load` event is fired when the entire page and all its dependent resources (images, stylesheets, iframes, etc.) are fully loaded.

- \*\*Use Case\*\*:  
 - Use this event when you need to perform actions that require all resources to be completely available, such as measuring image dimensions or starting animations that depend on CSS being fully applied.

- \*\*Example\*\*:  
```javascript  
window.addEventListener("load", () => {  
 console.log("The entire page, including images and stylesheets, is fully loaded.");  
});  
```

## Key Differences

|  |  |  |
| --- | --- | --- |
| Feature | `DOMContentLoaded` | `load` |
| Timing | Fires earlier (as soon as DOM is parsed) | Fires later (after all resources are loaded) |
| Dependencies | Does not wait for external resources | Waits for all external resources |
| Purpose | Initialize scripts and manipulate the DOM | Perform tasks requiring full resource availability |
| Browser Behavior | Occurs even if images or stylesheets are still loading | Ensures every resource is loaded |

## Example Timeline

1. HTML is parsed → `DOMContentLoaded` fires.  
2. All resources like images and stylesheets are loaded → `load` fires.