

A deep dive into Flexbox and Grid

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Screens, screens, screens

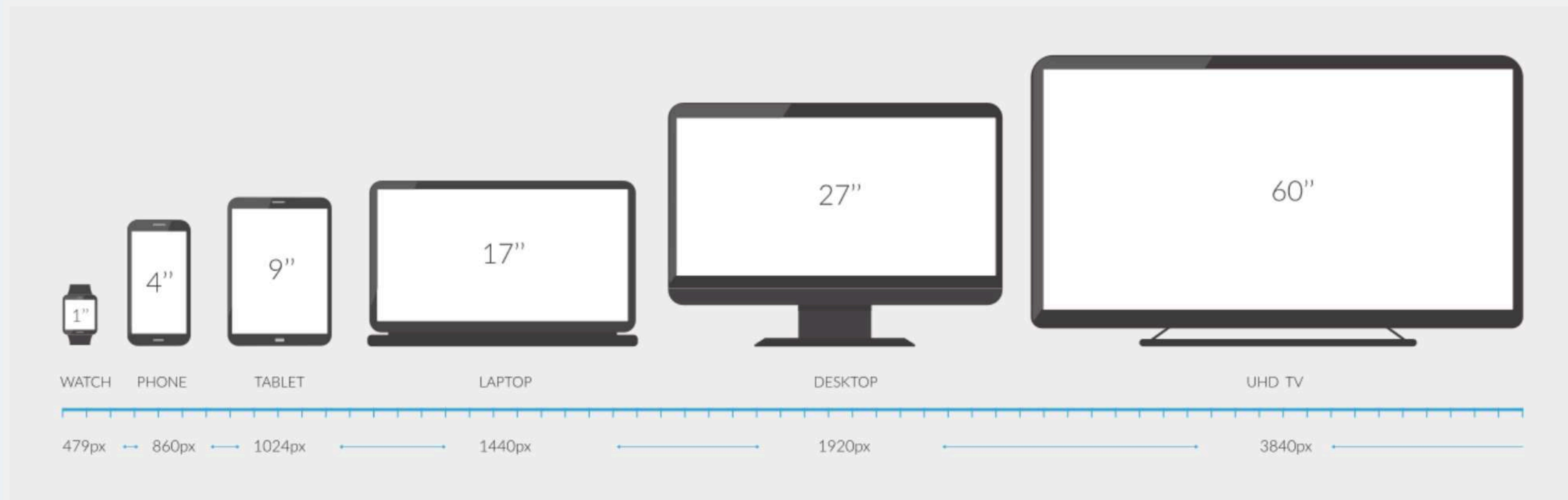


Image source: [Inch Calculator](#)

Layout technique: float

Item A	Item B	Item C

```
.float__item {  
  float: left;  
  width: calc(100% / 3);  
}
```

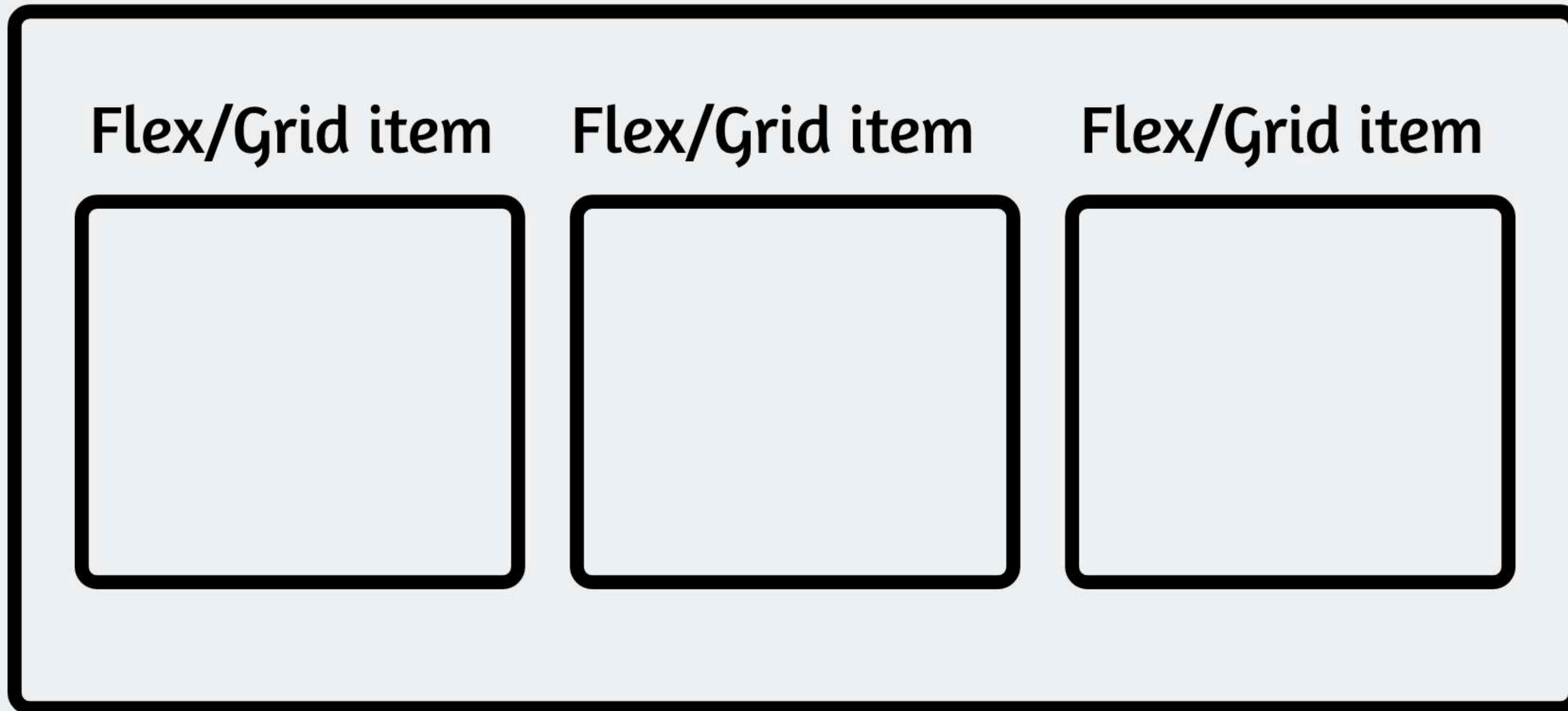

Layout technique: inline-block

Item A	Item B	Item C

```
.inlineblock__item {  
  display: inline-block;  
  width: calc(100% / 3);  
}
```


The parent-child relationship

Flex/Grid container

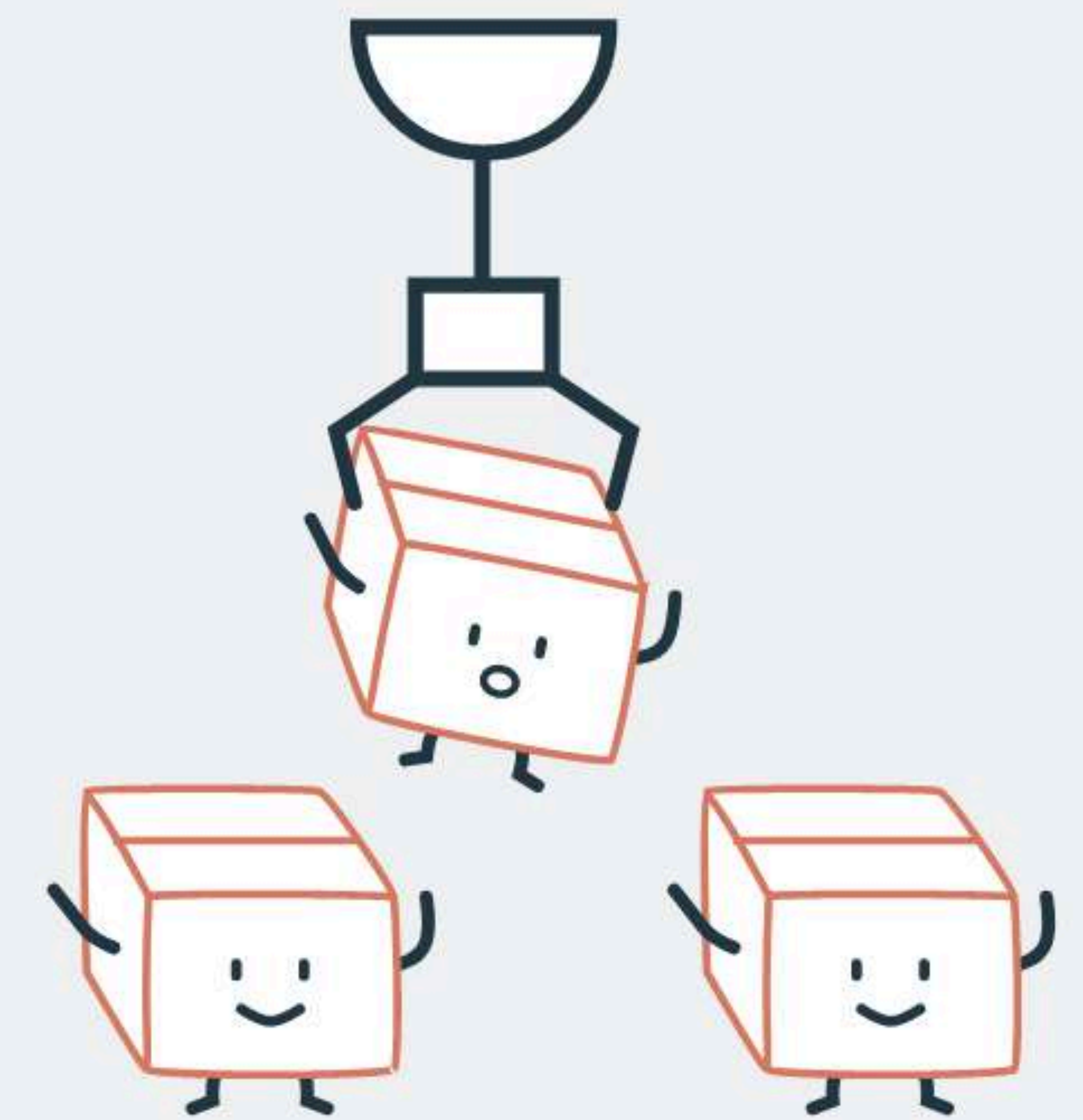
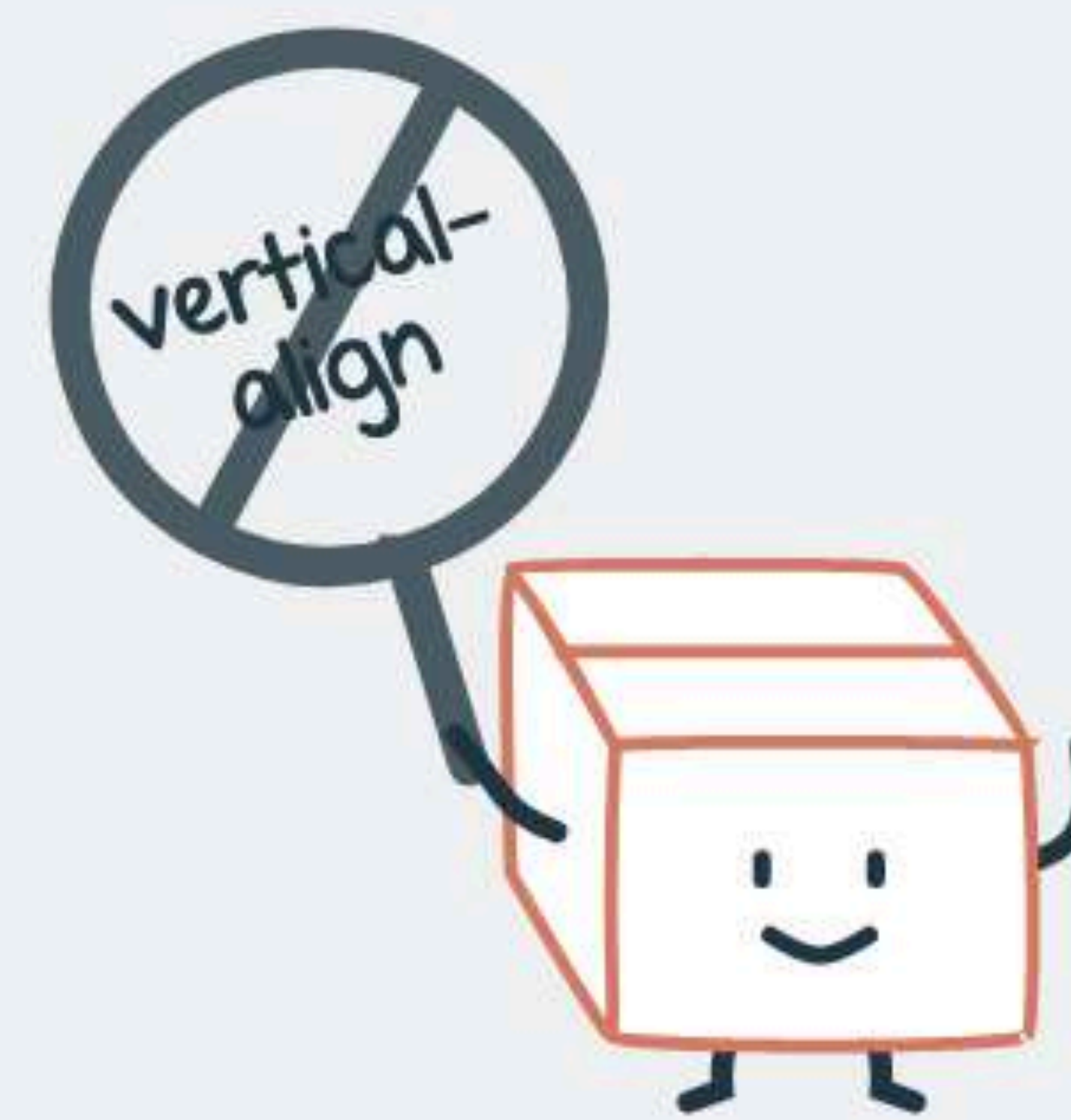


Layout technique: flex

A flex item	Another flex item	Flex items are also flex children	<i>All direct children of the flex container become flex children</i>

```
.flexbox {  
  display: flex;  
}
```


Flex formatting context



Flexbox devtools

The screenshot displays the Chrome DevTools interface. On the left, a browser window shows a horizontal container with three items, each labeled "I am an item.". The first item is highlighted with a blue border. A tooltip for the selected element shows "p.item" with dimensions "94.45 x 22.5" and the label "Flex Item".

The right pane shows the "Inspector" tab with the HTML structure:

```
<!DOCTYPE html>
<html lang="en">
  <head>
  </head>
  <body class="vsc-initialized">
    <div class="container">
      <p class="item">I am an item.</p>
      <p class="item">I am an item.</p>
      <p class="item">I am an item.</p>
    </div>
  </body>
</html>
```

The breadcrumb trail indicates the selected element is `html > body.vsc-initialized > div.container > p.item`. The "Layout" tab is active, showing the "Flex Item of div.container" section. A visual representation of the flex item is shown with a blue background and a dotted border. The "Content Size" and "Final Size" are both listed as 94.45px. The "Grid" section indicates "CSS Grid is not in use on this page", and the "Box Model" section is partially visible.

The flex property

Flex grow

Flex basis



```
flex: 0 1 auto;
```

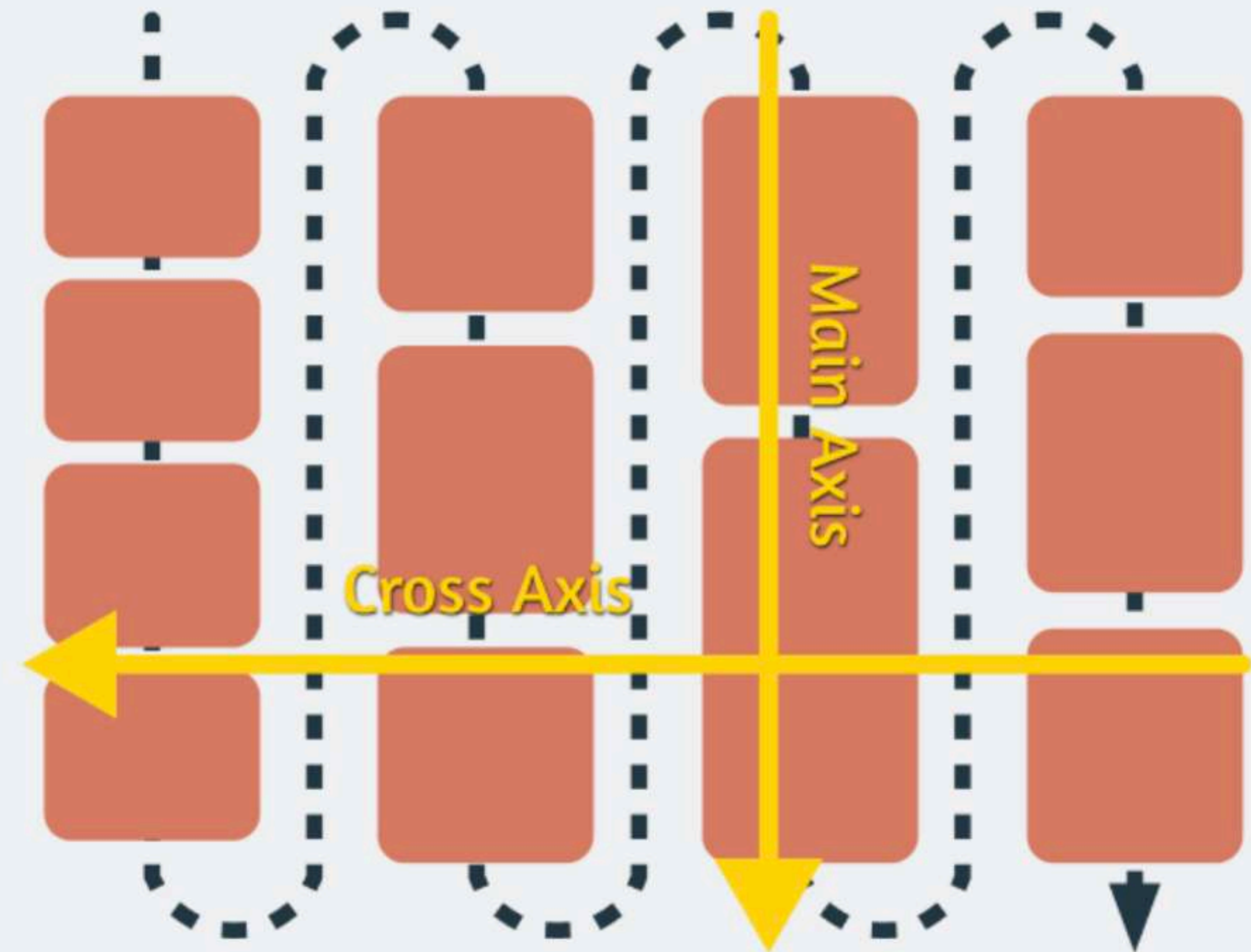
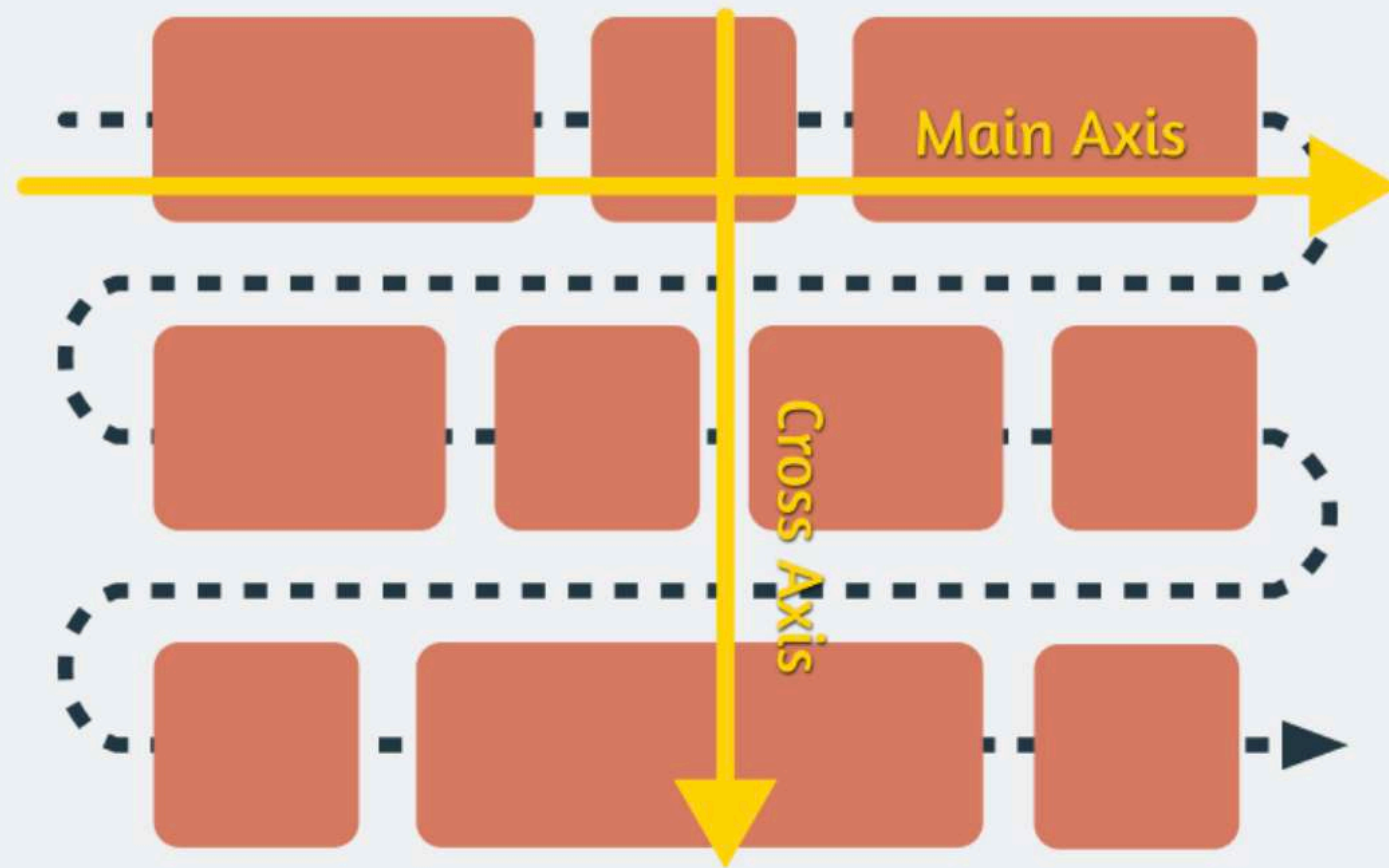
The diagram illustrates the components of the flex property. A dark blue rounded rectangle contains the text 'flex: 0 1 auto;'. Three orange arrows point to specific parts of this text: one points down to the '0', another points down to the '1', and a third points up to the 'auto'.

Flex shrink

Sizing in flexbox

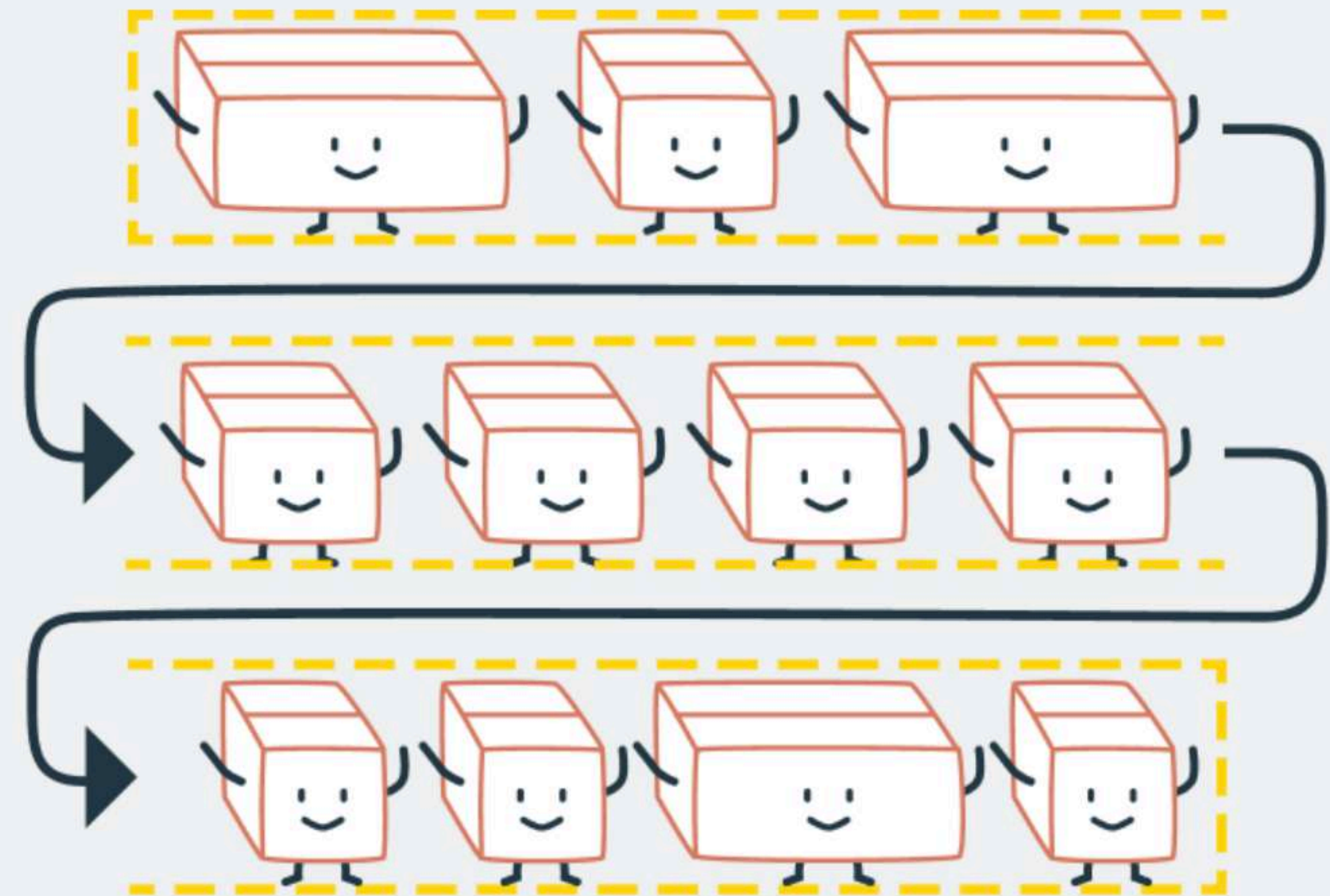
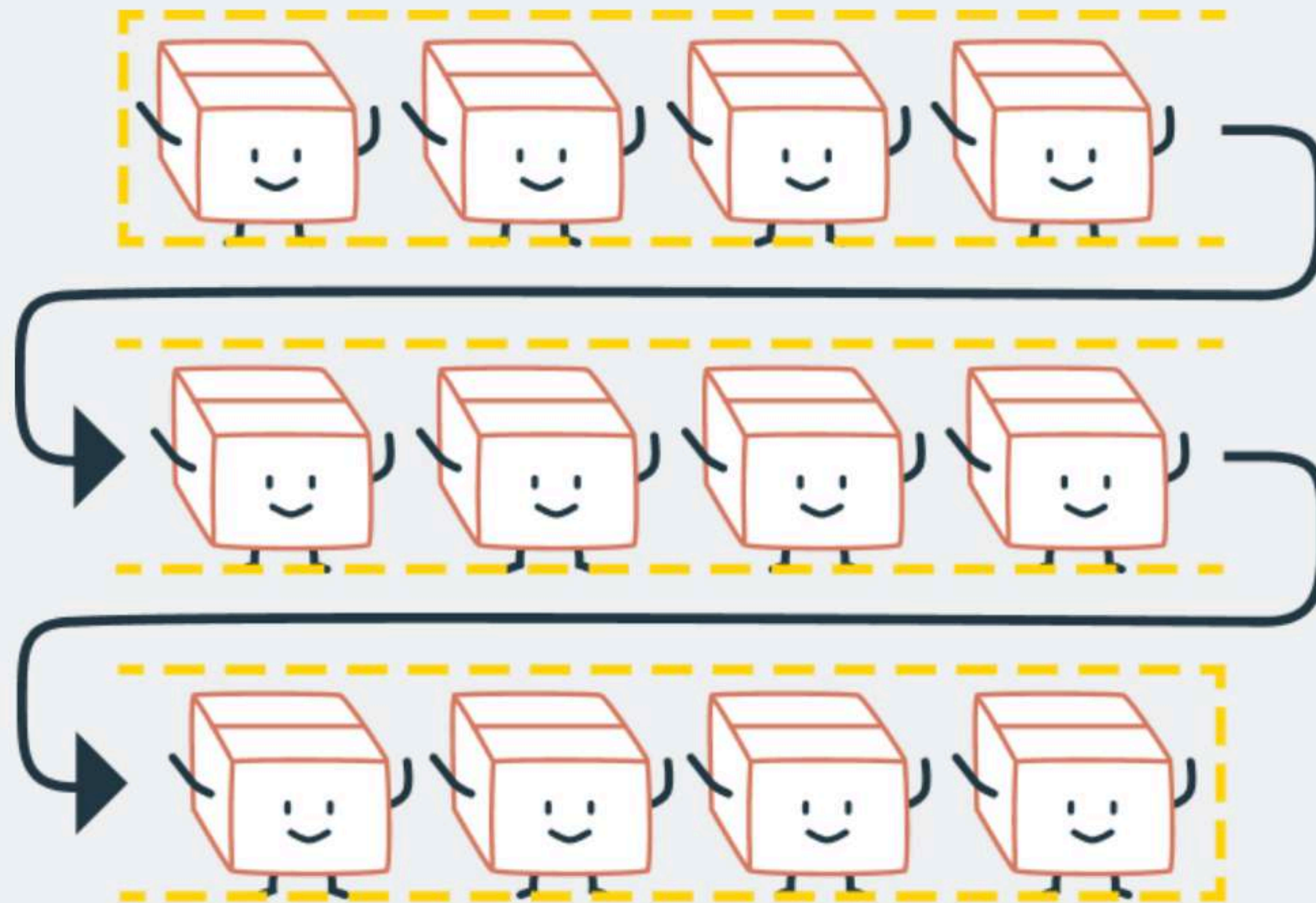
[View demo](#)

Flex directions

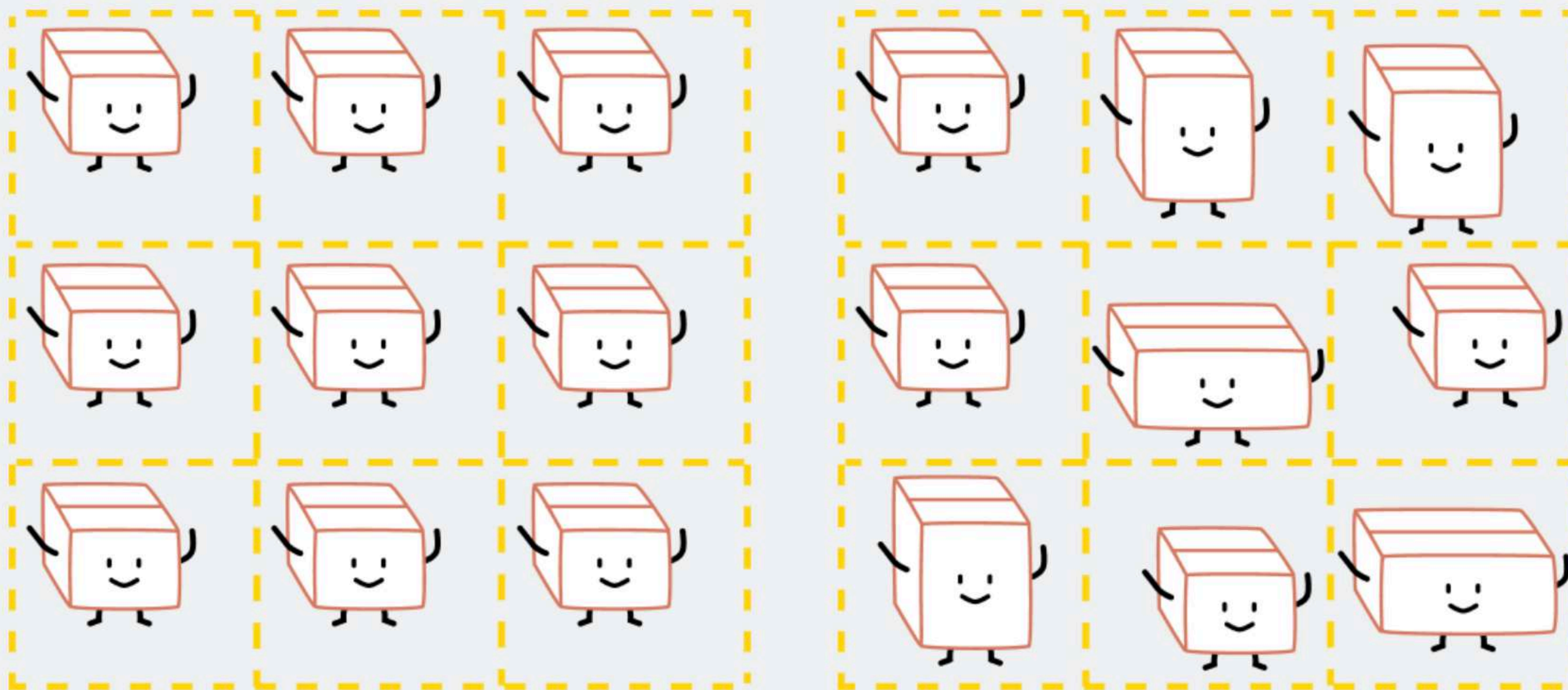


View demo

No actual grid



Real two-dimensional awareness



Layout technique: grid

Item A	Item B	Item C
Item D	Item E	Item F

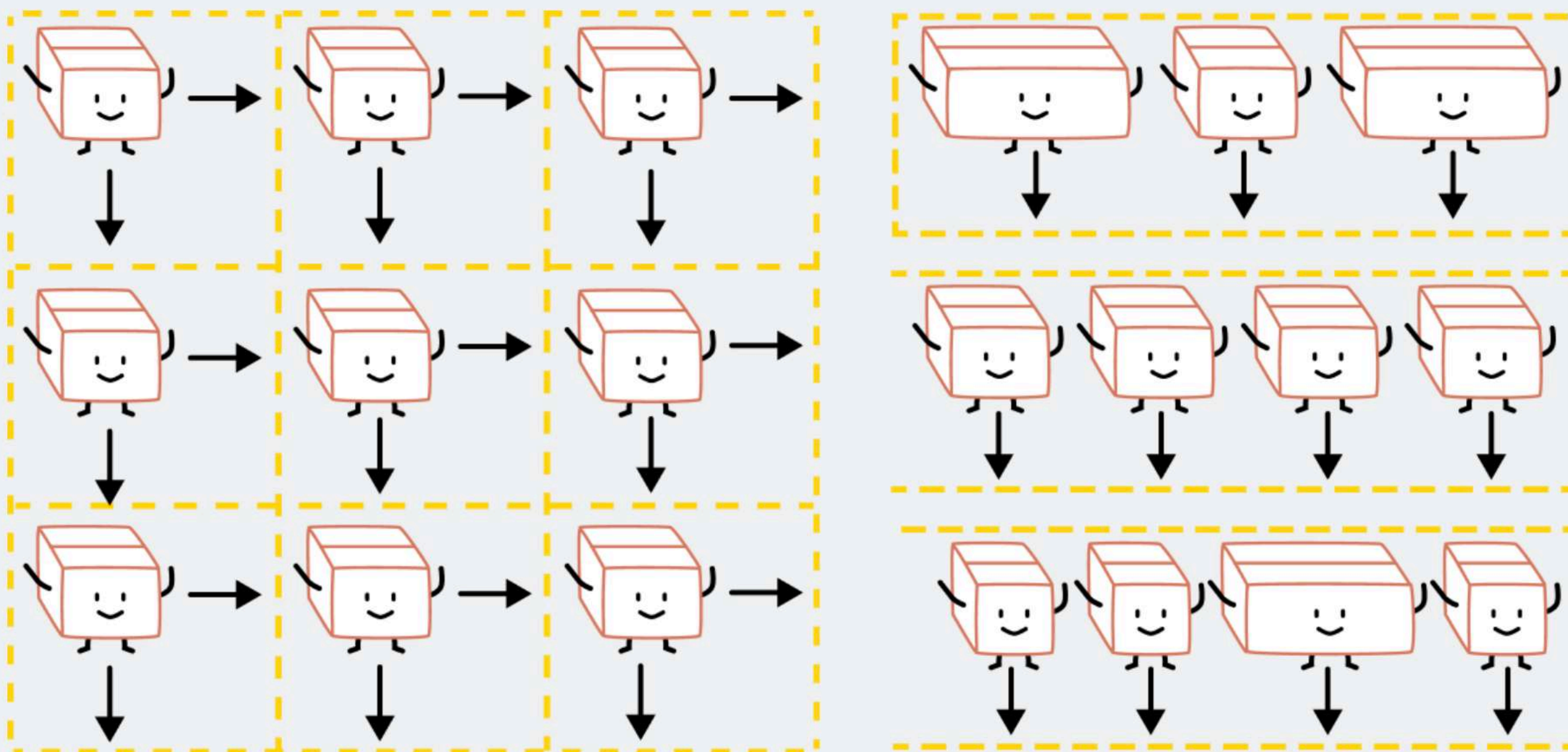
```
.grid {  
  display: grid;  
  grid-template-columns: 1fr  
1fr 1fr;  
  grid-template-rows: 200px  
200px;  
}
```


A better way of building grids

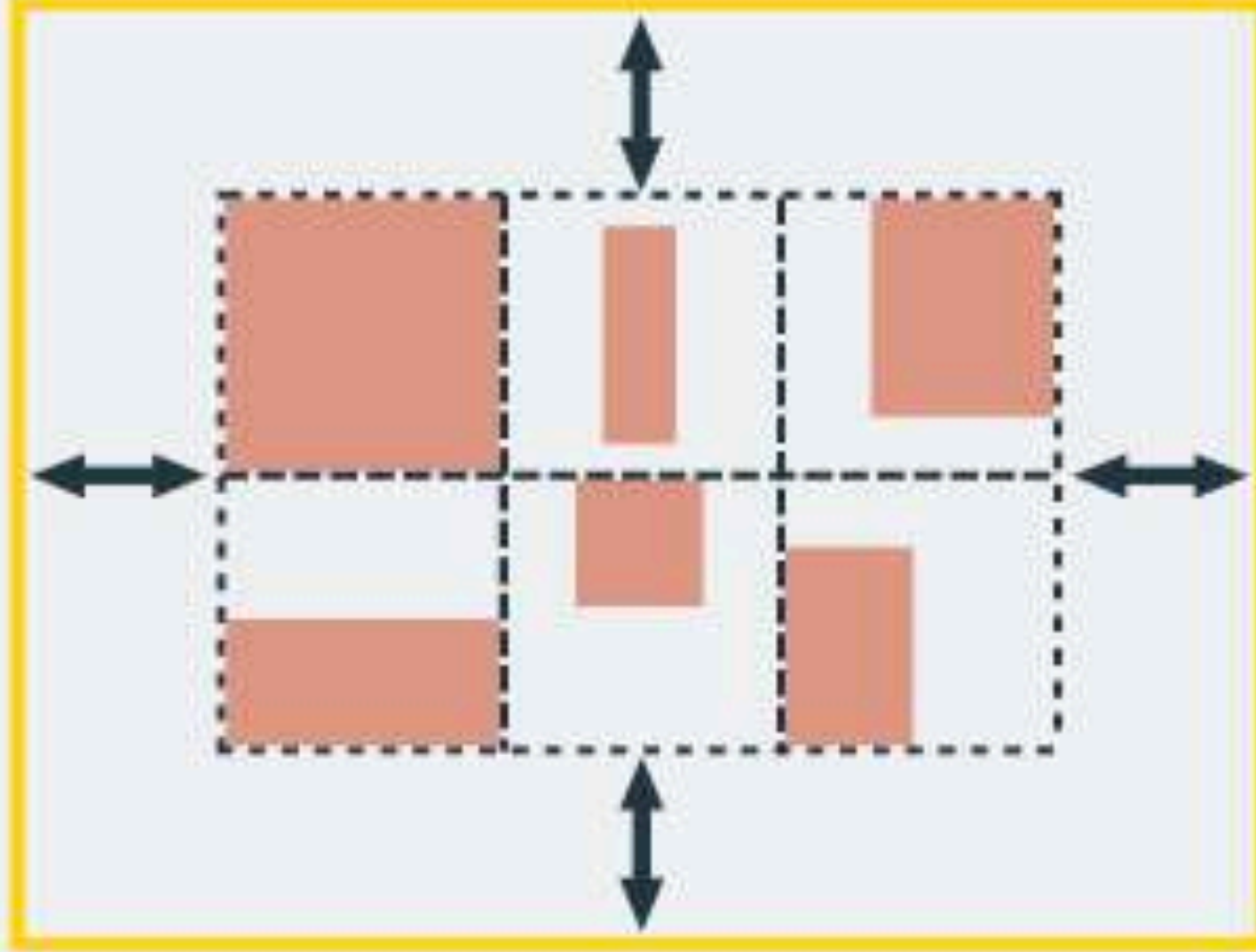
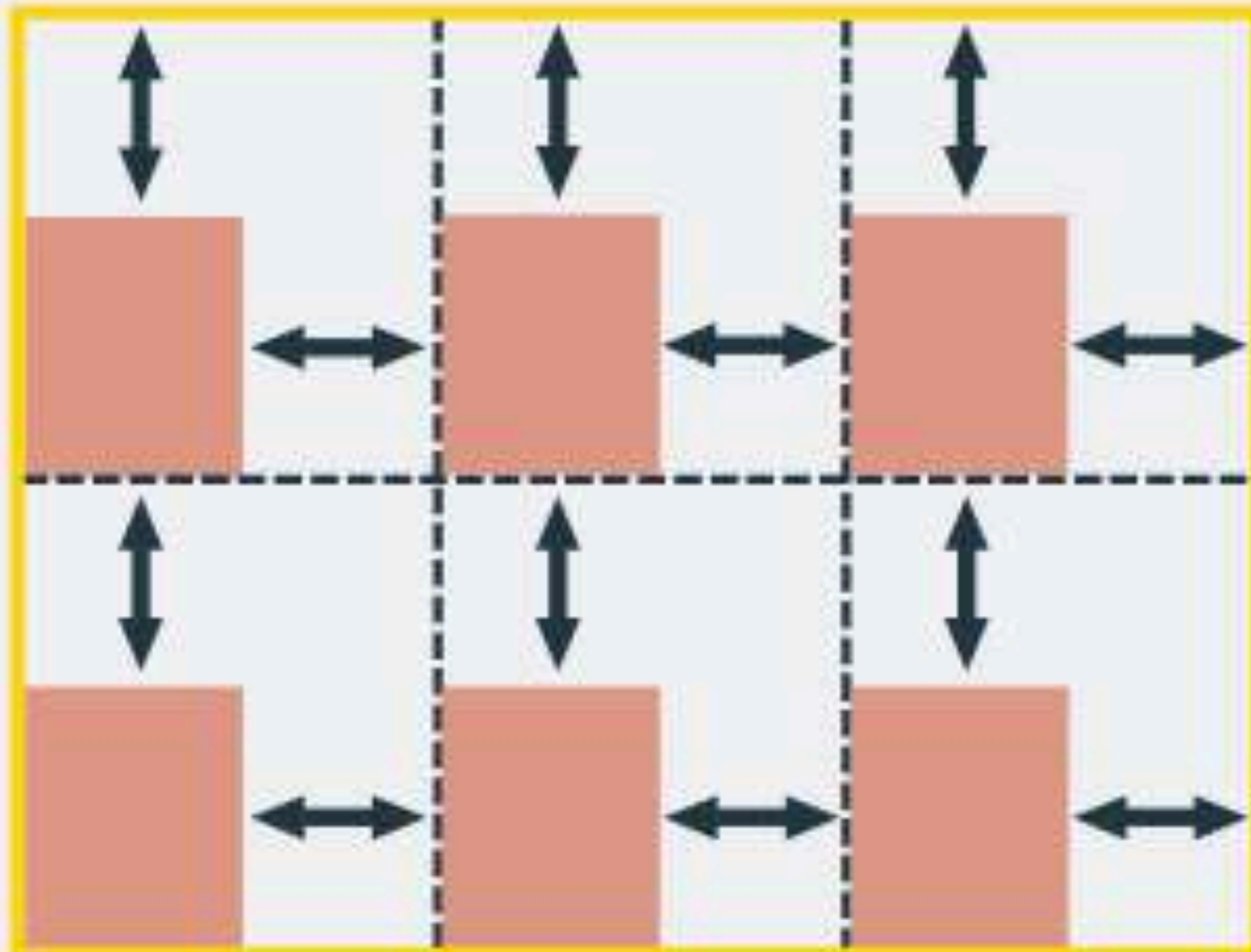
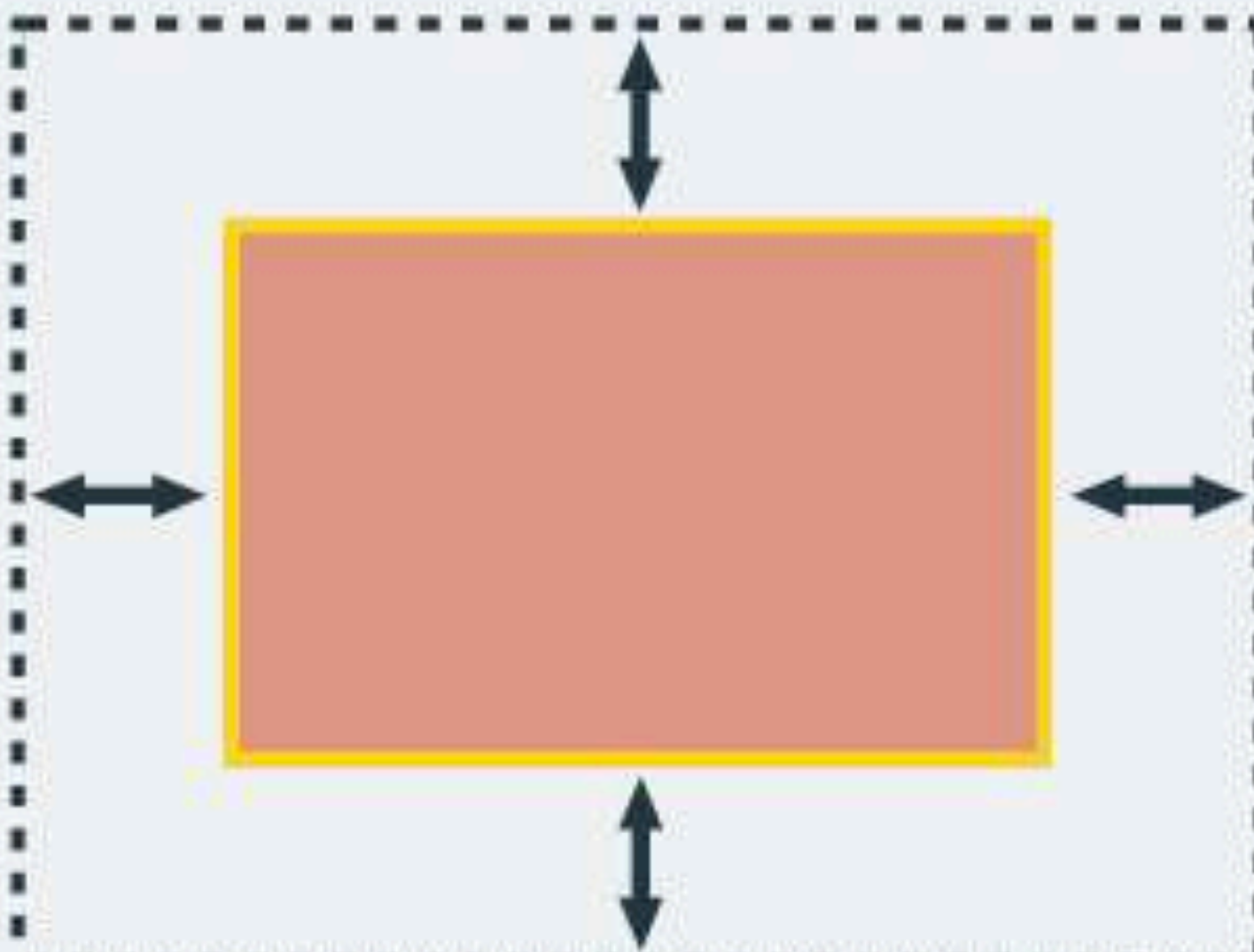
[View demo](#)

The magic sauce

No, just kidding. It's just that alignment really ties it all together.



Box alignment properties

Property	Axis	Aligns		Applies to
justify-content	main/inline	content within element (effectively adjusts padding)		block containers, flex containers and grid containers
align-content	cross/block			
justify-items	inline	items inside box (controls child items)		block containers and grid containers
align-items	cross/block			flex-containers and grid-containers
justify-self	inline	element within parent (effectively adjusts margins)		block-level boxes, absolutely-positioned boxes and grid items
align-self	cross/block			absolutely-positioned boxes, flex items and grid items

Can we put it all together?

[View demo](#)

Thank you!



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