

# Multi-column Sample

# Dictionary Layout

The following example shows how to create a basic multi-column document with two columns, balanced content and a small gap.

Peace, n.	1. Calm, repose, quiet, tranquillity, stillness, silence. 2. Amity, concord, harmony, truce, armistice.	muriate of bismuth.
Peaceable, a.	1. Peaceful, pacific, free from war. 2. Gentle, mild, amicable, friendly, disposed to peace, not quarrelsome. 3. Quiet, tranquil, placid, unmoved, undisturbed, serene.	Pearly, a. 1. Abounding in pearls. 2. Clear, pure, transparent, nacreous.
Peaceful, a.	1. Quiet, calm, still, undisturbed, placid, tranquil, serene. 2. Mild, gentle, kindly, friendly.	Peasant, n. Rustic, countryman, hind, swain.
Peace-maker, n.	Mediator, intercessor.	Pebble, n. Stone (of small size), pebble-stone.
Peace-making, a.	Conciliatory, mild, appeasing.	Pebble-stone, n. Pebble.
Peace-offering, n.	1. Atonement, satisfaction, amends, reparation, atoning sacrifice. 2. Mediation, olive-branch, intercession.	Peccability, n. Frailty, infirmity, weakness, liability to sin.
Peak, n.	Top (of a mountain), summit, crest, crown, pinnacle.	Peccable, a. Frail, weak, imperfect, erring, sinning, liable to sin.
Peak, v. n.	1. Grow thin or lean, become emaciated. 2. Sneak, make a mean figure.	Peccadillo, n. Petty fault, slight offence.
Peaked, a.	Pointed.	Peccant, a. 1. Sinning, erring, guilty, criminal. 2. Morbid, malignant, corrupting, corroding.
Peal, n.	Blast, burst, blare, clang.	Peculation, n. Embezzlement.
Peal, v. n.	Resound, echo, re-echo, boom, thunder, roar.	Peculiar, a. 1. That specially pertains, that belongs exclusively. 2. Singular, particular, characteristic, special, exceptional, rare, not common, not general.
Pea-nut, n.	Ground-nut, earth-nut ( <i>Arachis hypogaea</i> ).	Peculiarity, n. Individuality, idiocrasy, idiosyncrasy, characteristic, speciality, singularity.
Pearlash, n.	Sub-carbonate of potassa (impure), calcined potash.	Pecuniary, a. Monetary, financial.
Pearl-powder, n.	Pearl-white.	Pedagogue, n. [A contemptuous term.] Schoolmaster, teacher.
Pearl-white, n.	Pearl-powder, sub-	Pedant, n. Pretender to learning.
		Pedantic, a. Conceited, pragmatical, vain of knowledge, ostentations of learning.

Excerpt from "Dictionary of English Synonymes" by Richard Soule via Project Gutenberg: <http://www.gutenberg.org/files/38390/38390-h/38390-h.htm>

```
div.dictionary {  
    height: 6in; /* if not set the box shrinks to the balanced column's height */  
    column-count: 2; /* defines two columns */  
    column-gap: 0.25in; /* defines the gap width */  
    ...
```

## Journal Layout

In this example the columns are defined by width and their content is laid out to fully fill each column before beginning the next rather than balancing all column heights equally. The gap is a little bigger, to leave room for written side-notes.

Monday,                    8th.  
Fresh Breezes and Cloudy  
weather the most part of  
these 24 hours. At 10 a.m.  
weighed and came to sail;  
at Noon the South  
Foreland bore North-East  
1/2 North, distant 6 or 7  
Miles. Wind West by North,  
North-West.

Tuesday,                    9th.  
Gentle breezes and Cloudy  
weather. At 7 p.m. the Tide  
being against us, Anchored  
in 13 fathoms of Water;  
Dungeness South-West by  
West. At 11 a.m. Weighed

and made Sail down  
Channel; at Noon, Beachy  
Head, North by East 1/2  
East, distant 6 Leagues,  
Latitude observed 50  
degrees 30 minutes North.  
Wind North-West to North.

Wednesday,                10th.  
Variable: light Airs and  
Clear weather. At 8 p.m.  
Beachy Head North-East by  
East, distant 4 Leagues,  
and at 8 a.m. it bore North-  
East by North, 9 Leagues.  
Found the Variation of the  
Compass to be 23 degrees  
West; at Noon the Isle of

Wight North-West by  
North. Wind West by  
North, North-East by East.

Thursday, 11th.  
Light Airs and Clear  
weather. At 8 p.m.  
Dunnoe North by West 5  
Leagues, and at 4 a.m. it  
bore North-North-East 1/2  
East, distant 5 Leagues.  
Wind Variable.

Excerpt from "Captain Cook's Journal, First Voyage", Chapter 1 "England to Rio Janeiro" by James Cook via Project Gutenberg: <http://www.gutenberg.org/files/8106/8106-h/8106-h.htm>

```
div.script {  
    width: 5.5in;  
    height: 6in; /* if not set columns will use space until end of the page */  
    column-width: 2.5in; /* define column width, makes two for this box */  
    column-gap: 0.5in;  
    column-fill: auto; /* disables balanced column layout */  
}
```

## Restaurant Menu with Spanning Content

The following example shows an advanced layout with rules between columns and a headline and an image spanning the columns.

### Sushi

Sushi (すし, 寿司, 鮓, 鮓, 寿斗, 寿し, 壽司) is a Japanese food consisting of cooked vinegared rice (shari) combined with

other ingredients (neta). Neta and forms of sushi presentation vary, but the ingredient which all sushi have in common is shari. The most common neta is seafood.

1000 x 244

## Maki Sushi

- **Avocado Maki**  
avocado, rice and nori (dried

seaweed)

- **Kappa Maki**  
cucumber, rice and nori (dried seaweed)
  - **Sake Maki**  
salmon, rice and nori (dried seaweed)
  - **Tekka Maki**  
tuna, rice and nori (dried seaweed)
- Nigiri Sushi**
- **Sake Nigiri**  
salmon, rice
  - **Ebi Nigiri**  
shrimp, rice
  - **Maguro Nigiri**  
tuna, rice

Excerpt "Sushi" from Wikipedia: <http://en.wikipedia.org/wiki/Sushi>

```
div.menu {  
    column-count: 2;  
    column-gap: 0.25in;  
    column-rule: thin solid gray; /* adds a thin gray line between columns*/  
    ...  
}  
div.menu h1 {  
    column-span: all; /* heading spans all the columns */  
    ...  
}  
div.menu img {  
    display: block;  
    width: 100%;  
    margin-top: 0.25in;  
    margin-bottom: 0.25in;  
    column-span: all; /* picture spans all the columns */  
    ...  
}
```

## Article with Single-Content Columns

This simple example shows how content like a heading or image can be made sole content of a column using manual column breaks.

# **United States Capitol**

The United States Capitol is the meeting place of the United States Congress, the legislature of the federal government of the United States. Located in Washington, D.C., it sits atop Capitol Hill at the eastern end of the National Mall. Though it has never been the geographic center of the federal district, the Capitol is the origin by which both the quadrants of the District are divided and the city was planned. Officially, both the east and west sides of the Capitol are referred to as "fronts."

603 x 1293

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Historically, intended for the buildings for the distinctive however, only the arrival of visitors executive and neoclassical style east front of the and dignitaries. judicial branches, and has a white building was Like the federal it is built in the exterior.

Excerpt "United States Capitol" from Wikipedia: [http://en.wikipedia.org/wiki/United\\_States\\_Capitol](http://en.wikipedia.org/wiki/United_States_Capitol)

```
div.article {  
    height: 2.5in;  
    column-count: 5;  
    ...  
}  
div.article h1 {  
    break-after: column; /* explicit break ensures heading has own column */  
    ...  
}  
div.article img {  
    display: block;  
    height: 100%; /* makes the picture as high as the column it's in */  
    margin: auto;  
    break-before: column; /* explicit breaks ensure picture has own column */  
    break-after: column;  
}
```

# Ensuring Vertical Rhythm for Improved Readability

This sample shows how the different values of the property `-ro-line-snap`

`-ro-line-snap: none`

## **Lorem**

ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est Lorem ipsum dolor sit amet.

## **Lorem**

ipsum dolor sit

`-ro-line-snap: baseline`

## **Lorem**

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## **Lorem**

ipsum dolor sit

`-ro-line-snap: contain`

## **Lorem**

ipsum dolor sit amet, consetetur sadipscing elitr, sed diam nonumy eirmod tempor invidunt ut labore et dolore magna aliquyam erat, sed diam voluptua. At vero eos et accusam et justo duo dolores et ea rebum. Stet clita kasd gubergren, no sea takimata sanctus est Lorem ipsum dolor sit amet.

## **Lorem**

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## **Lorem**

ipsum dolor sit

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voluptua. At  
vero eos et  
accusam et  
justo duo  
dolores et ea  
rebum. Stet  
clita kasd  
gubergren, no  
sea takimata  
sanctus est  
Lorem ipsum  
dolor sit amet.

sed diam  
voluptua. At  
vero eos et  
accusam et  
justo duo  
dolores et ea  
rebum. Stet  
clita kasd  
gubergren, no  
sea takimata  
sanctus est  
Lorem ipsum  
dolor sit amet.

```
sed      diam  
voluptua. At  
vero eos et  
accusam et  
justo      duo  
dolores et ea  
rebum. Stet  
clita      kasd  
gubergren, no  
sea      takimata  
sanctus est  
Lorem ipsum  
dolor sit amet.
```

```
div.gridlayout {  
    column-count: 3;  
    -ro-line-grid: create; /* create the virtual grid to which lines can snap */  
    line-height: 1.2; /* sets the distance between the virtual grid lines */  
    ...  
}  
div.none {  
    -ro-line-snap: none; /* text is not vertically aligned to grid */  
}  
div.baseline {  
    -ro-line-snap: baseline; /* text baseline is vertically aligned to grid */  
}  
div.contain {  
    -ro-line-snap: contain; /* larger text is aligned in the middle of grid lines */  
}
```

As seen in the first box, without a line grid differently sized elements like the headers shift the lines. There is a noticeable deviation in the vertical position of lines in two adjacent columns. Also single lines at the bottom of a column may stand out.

To prevent this unaesthetic positioning, the lines of all columns need to be aligned to a common, invisible grid. With the CSS property `-ro-line-grid`, such a virtual grid is created. By setting the property `-ro-line-snap`, lines can be aligned to this grid.

In the second box, the baselines of the text are aligned to said invisible grid. Adjacent lines now have the same vertical position, which improves the readability and gives the text a tidier look. Note that the distance between the headings and paragraphs has become larger, as the first line has to be moved further down in order to match its baseline with the grid.

In the third box, the property is set to `contain`. This has no different effect on the normal text, however for text with a different line-height or font, this yields a different result. While headings are no longer baseline aligned, the result can, depending on the specific scenario, be space-saving. Whether it visually fits the

surrounding design has to be tried.

In all cases the top and bottom margins of paragraphs and headings may require adjustments to produce the desired result.