



WIKIDATA

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Wiki*

[Wikipedia](#) -- a multilingual web-based free-content encyclopedia

[MediaWiki](#) -- free and open-source wiki software

[Wikidata.org](#) -- a collaboratively edited structured dataset used by Wikimedia sister projects and others

[Wikibase](#) -- a MediaWiki extension to store and manage structured data

WIKIDATA IN BRIEF

Claim: Item – Property – Value

Item Q number
Property P number

item	property	value
Marie Curie	field of work	chemistry
Q7186	P101	Q2329

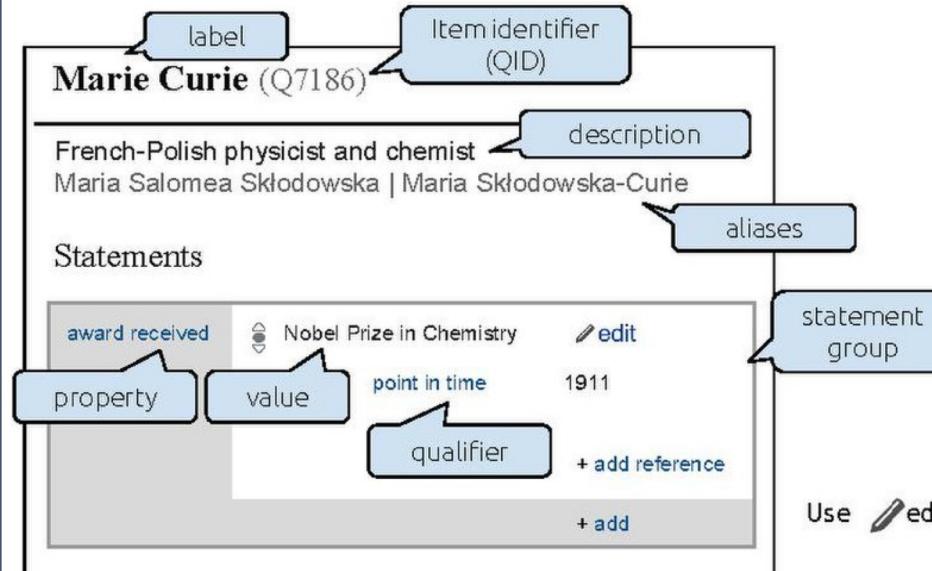
Wikidata item basics

[Label, description, aliases](#) – human friendly language-specific strings

[Statements](#) – includes identifiers, sitelinks at bottom of an item

[Qualifiers](#) – adds details to claims (ie. dates, distinctions, etc)

[Copyright](#) - all content in Wikidata is Creative Commons CC0 (public domain)



Critical concepts

[Help:Basic membership properties](#)

Instance (P31) vs subclass (P279)

[Help:Sources](#)

Adding references, use "stated in" or "reference URL"

Displaying items

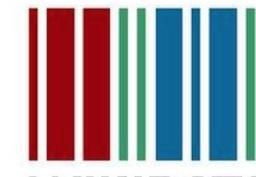
[Reasonator](#) and [SQID](#) – rich visual display of Wikidata items

[Wikidata Graph Builder](#) – show connectedness of items based on properties

Querying

[Query.wikidata.org](#) – SPARQL interface. Explore example queries and display options. CTRL-Space auto-expands item and property names to Q/P numbers.

[VizQuery](#) – simple query using rules without requiring coding



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of Wikidata In Brief by
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Digital version:
bit.ly/wikidata-onepage

Use edit and +add to modify

Simple editing tools

[Distributed Game](#) – contribute through Yes/No/Skip micro-decisions

[Mix-n-Match](#) – connect external identifiers to Wikidata items

Bulk editing

[Quickstatements](#) – use tab-delimited claims to edit

[PetScan](#) – powerful toolbox for Wikipedia categories and Wikidata

[OpenRefine](#) – open source tool for cleaning messy data, reconciliation

[Data donation](#) - how and why to contribute, and guidelines for institutions

Other tools

[Google Spreadsheet Wikipedia Tools](#) – query Wikipedia and Wikidata from spreadsheet cells

[External tools](#) - comprehensive list of all Wikidata tools

Community and news

[Wikidata:Project chat](#) – discussion forum

[Wikidata>Status updates](#) – weekly summary newsletter

Customizing user accounts

Turn on Preferences > Gadgets:

[Primary Sources](#) – curate suggested data and references

[checkConstraints](#) – show property constraints for statements using a triangular warning icon

Wikipedia Today

- More than 5.7 million English articles
- Top 10 most visited site
- High reputation and cultural partnerships

But

- Knowledge scattered among 30 million articles in 200+ languages
- Inconsistency, gaps and replication
- How to consolidate knowable facts, e.g., birthdate of Barack Obama

Wikimedia lesson

- 2001: Images scattered across Wikipedia editions
- 2004: **Wikimedia Commons** centralized and consolidated multimedia objects
 - e.g., one standard image for Barack Obama that can be used across all of the pages about him in different Wikipedia instances
 - See https://en.wikipedia.org/wiki/Barack_Obama
- See commons.wikimedia.org

Wikidata today

- Wikidata used by
 - Google Knowledge Graph
 - Digital assistants: Siri, Alexa
- Infoboxes on Wikipedia
- Structured data on Commons
- Wikicite, WikidataCon conferences

Wikidata future

- Convert encyclopedic lexical content into "structured" statements
- Turn human readable into machine understandable
- Link to stable external data of LAM institutions
 - LAM = libraries, archives, and museums
- "Semantic web" realized

Example entities and properties

Entities

- [Q1](#) – the universe
- [Q42](#) – douglas adams
- [Q59000000](#)

Properties

- P31 – instance of

Moving to structured data

Lexical

United States Congress

From Wikipedia, the free encyclopedia

Coordinates:  38°53'23"N 77°0'32"W

For the current Congress, see [115th United States Congress](#). For the building, see [United States Capitol](#).

The **United States Congress** is the bicameral legislature of the **federal** government of the **United States** consisting of two chambers: the **Senate** and the **House of Representatives**. The Congress meets in the **Capitol** in Washington, D.C. Both senators and representatives are chosen through direct election. though vacancies in the Senate may be filled by a **gubernatorial**

United States Congress

115th United States Congress



Semantic

United States Congress

instance of

bicameral legislature

United States Congress

in country

United States

Moving to structured data

Lexical

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United States Congress

115th United States Congress



United States Congress

instance of

bicameral legislature

C

United States Congress

in country

United States

Semanti

Wikidata item for United States Congress ([Q11268](#))

United States Congress [\(Q11268\)](#)

legislature of the United States

 [edit](#)

US Congress | U.S. Congress | American Congress | Congress of the United States | Legislature of the United States | American

legislature | United states legislative branch | Congress

[In more languages](#) Configure

Language	Label	Description	Also known as
English	United States Congress	legislature of the United States	US Congress U.S. Congress American Congress Congress of the United States Legislature of the United States American legislature United states legislative branch Congress

Wikidata item for United States Congress (Q11268)

Statements

instance of

bicameral legislature

 edit

▼ 0 references

+ add reference

+ add value

part of

Federal Government of the United States

 edit

▼ 0 references

+ add reference

+ add value

country

United States of America

 edit

▼ 0 references

+ add reference

+ add value

Wikidata Basics

Q numbers - item

- Anyone can make a Q item
- Corresponds to Wikipedia article / concept
- Examples
 - Q1 - the Universe
 - Q2 - Earth
 - Q5 - human
 - Q146 - cat
 - Q729 - animal
 - Q571 - book
 - Q7075 - library
 - Q309331 - The Ohio State University

P numbers - property

- Controlled vocabulary for consistency
- Proposal, discussion and approval process
- Examples
 - P31 - instance of
 - P279 - subclass of
 - P214 - VIAF ID
 - P569 - date of birth
 - P625 - coordinate location
- See: [Wikidata:List_of_properties](#)

Wikidata item page

George Washington (Q23) ...

first President of the United States

Father of the United States | Washington | President Washington



► In more languages

Statements

instance of

human ...



► 2 references

+ add

part of

Founding Fathers of the United States ...



▼ 0 references

+ add reference

+ add

image

Gilbert Stuart Williamstown Portrait of George Washington.jpg



► 1 reference

+ add

sex or gender

male ...



► 3 references

+ add

country of citizenship

United States of America ...



Wikidata statement triples

Item	Property	Value
"George Washington"	"instance of"	"human"
Q23	P31	Q5

"George Washington"	"place of burial"	"Mount Vernon"
Q23	P119	Q731635

"George Washington"	"LCAuth ID"	"n86140996"
Q23	P244	

Wikidata and languages

zh 乔治·华盛顿	zh 性質	zh 人類
ms "George Washington"	ms "contoh"	ms "manusia"
es "George Washington"	es "instancia de"	es "ser humano"
de "George Washington"	de "ist ein(e)"	de "Mensch"
en "George Washington"	en "instance of"	en "human"
Q23	P31	Q5

Wikidata link on Wikipedia articles

WIKIPEDIA
The Free Encyclopedia

Main page
Contents
Featured content
Current events
Random article
Donate to Wikipedia
Wikipedia store

Interaction
Help
About Wikipedia
Community portal
Recent changes
Contact page

Tools
What links here
Related changes
Upload file
Special pages
Permanent link
Page information
Wikidata item
Cite this page

Article Talk

Not logged in Talk Contributions Create account Log in

Read Edit View history

Search Wikipedia

United States Congress

From Wikipedia, the free encyclopedia

Coordinates: 38°53'23"N 77°0'32"W

For the current Congress, see [115th United States Congress](#). For the building, see [United States Capitol](#).

The **United States Congress** is the [bicameral](#) legislature of the [federal government](#) of the [United States](#) consisting of two chambers: the [Senate](#) and the [House of Representatives](#). The Congress meets in the [Capitol](#) in Washington, D.C. Both senators and representatives are chosen through [direct election](#), though vacancies in the Senate may be filled by a [gubernatorial](#) appointment. Congress has 535 voting members: 435 Representatives and 100 Senators.

The House of Representatives has [six non-voting members](#) in addition to its 435 voting members. These members can, however, sit on congressional committees and introduce legislation. These members represent [Washington, D.C.](#), [Puerto Rico](#), [American Samoa](#), [Guam](#), the [Northern Mariana Islands](#) and the [U.S. Virgin Islands](#).

The members of the House of Representatives serve two-year terms representing the people of a single constituency, known as a "district". Congressional districts are [apportioned](#) to states by [population](#) using the [United States Census](#) results, provided that each state has at least one congressional representative. Each state, regardless of population or size, has two senators. Currently, there are 100 senators representing the 50 states. Each senator is elected at-large in their state for a six-year term, with terms staggered, so every two years approximately one-third of the Senate is up for election.

Congress members are usually affiliated to the [Republican Party](#) or to the [Democratic Party](#), and only rarely to a [third party](#) or as [independents](#).

Contents [hide]

United States Congress

115th United States Congress

Type

Type Bicameral
Houses Senate
House of Representatives

History

Founded March 4, 1789
(228 years ago)
Preceded by Congress of the Confederation
New session January 3, 2017

Wikidata stores statements as explicit triples - Item + property + value



United States Congress (Q11268) ...

legislature of the United States
US Congress | U.S. Congress | American Congress | Congress of the Uni...
legislature | United states legislative branch | Congress

In more languages

Statements

Property	Value	edit
"instance of"	"bicameral legislature" Q189445	+ add reference
P31	"bicameral legislature" Q189445	+ add reference
assembly	"bicameral legislature" Q189445	+ add reference
part of	Federal Government of the United States ...	+ add reference

Item United States Congress Q11268 edit

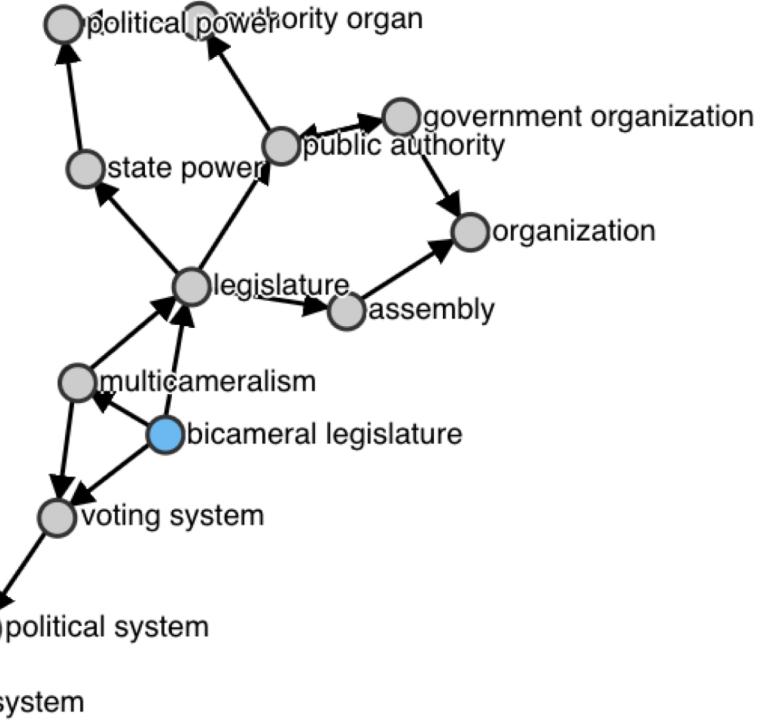
Statement details:

- Property: "instance of" (highlighted with a red box)
- Value: "bicameral legislature" (highlighted with a red box)
- Value ID: Q189445
- Assembly: "bicameral legislature" (highlighted with a red box)
- Assembly ID: Q189445
- Part of: Federal Government of the United States

Wikidata statement triples

Item	Property	Value
United States Congress	"instance of"	"bicameral legislature"
Q11268	P31	Q189445

Wikidata statement triples



Item
United States Congress

Q11268

Property
"instance of"

P31

Value
"bicameral legislature"

Q189445

Wikidata items

Muammar Gaddafi	Gadhafi	Mu'ammar al-Qaddafi
Muammar Muhammad Abu	Qaddafi	Muamar al Gadaffi
Minyar al-Gaddafi	Qaddāfi	Moammar Gadafi
Colonel Gaddafi	Muammar Muhammad Abu	Muammar al-Gaddafi
Kadhafi	Minyar al-Gaddafi	Muhammad Ghadaffi
Mu'ammar al Qaddāfi	Khadafi	Muammar el Gaddafi
Moammar Al Qadhafi	Mu'ammar al-Qađđāfi	Muamar al Gaddafhi
Qaddāfi	Gaddafi	Mu'ammar al-Qaddāfi
Gadafi	Muammar el Gadafi	Mu'ammar al Qaddafi
Kadaffi	Muamar al-Gaddafi	Khaddafi
Al-Khadafy	Muamar al Gaddafi	Muammar al Gaddafi
Gadaffi	Mu'ammar al Qaddafi	Qaddafi
Kaddafi	Kadafi	El Kazzafi
Muammar al-Gaddafi	Omar Gadafi	Muhamad Gadafi
Jaddafi	Kaddafi	Muamar al-Gaddafhi
Qaddafi	Moammar Jaddafi	
Muammar Gaddafi	Muamar Gadafi	
Muhamar Gadaffi	Muamar el-Gadafi	
Mu'ammar al-Qađđāfi	Mu'ammar al Qaddafi	
Al-Qadhdhaifi	Al-Qathafi	

53 Latinized
variations!
(May 2017)

Item
Muammar Gaddafi

Q19878