

Japanese for astronomers and engineers

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Overview

- Some basic information
- Japanese words
- Names and honorifics
- The Japanese writing system(s)
- Numbers
- Common kanji
- Cultural differences
- Calendar

Japan (Nihon or Nippon)

- An archipelago of 6,852 islands
- Main islands Honshu, Shikoku, Kyushu, Hokkaido
- Divided into 47 prefectures
- Capital city is Tokyo
- Population 130 million
- Highest life expectancy (82.6 years)
- A constitutional monarchy
- Lies at the junction of three tectonic plates

東京



The essential vocabulary?

- Yes and No
- Hello and Goodbye
- Please and Thank you
- Left, Right, Straight-ahead, and Stop

You already know many Japanese words

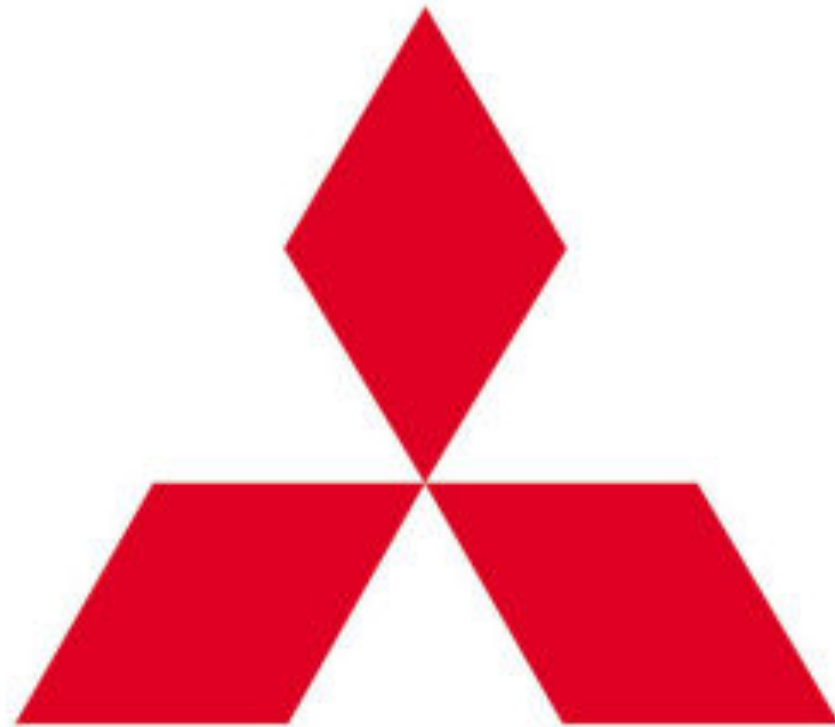
- Sushi, sashimi, tempura, teppan-yaki
- Kimono, geisha, obi
- Origami
- Zen
- Karaoke
- Karate
- Ninja
- Shogun
- Tycoon
- Honcho
- Hara-kiri
- Hunky Dory (?!)



SUBARU®

Subaru 8.2m optical telescope





**MITSUBISHI
MOTORS**

The writing styles

- Roma-ji
 - Two main variations
 - Hepburn system (shi, tsu, o)
 - Monbusho system (si, tu, wo)
 - Shinbun vs. Shimbun
 - Japanese find romaji difficult to read
- Hiragana (phonetic script, 46 characters)
- Katakana (like katakana, but mainly for transcriptions)
- Kanji (derived from Chinese, >5000 characters)

Hiragana

W	R	Y	M	H	N	T	S	K	-	
わ	ら	や	ま	は	な	た	さ	か	あ	a
	り		み	ひ	に	ち	し	き	い	i
	る	ゆ	む	ふ	ぬ	つ	す	く	う	u
	れ		め	へ	ね	て	せ	け	え	e
を	ろ	よ	も	ほ	の	と	そ	こ	お	o
					ん					-

Hiragana

ん (n)	わ (wa)	ら (ra)	や (ya)	ま (ma)	は (ha)	な (na)	た (ta)	さ (sa)	か (ka)	あ (a)
	ゐ (wi)	り (ri)		み (mi)	ひ (hi)	に (ni)	ち (chi)	し (shi)	き (ki)	い (i)
		る (ru)	ゆ (yu)	む (mu)	ふ (fu)	ぬ (nu)	つ (tsu)	す (su)	く (ku)	う (u)
	ゑ (we)	れ (re)		め (me)	へ (he)	ね (ne)	て (te)	せ (se)	け (ke)	え (e)
	を (wo)	ろ (ro)	よ (yo)	も (mo)	ほ (ho)	の (no)	と (to)	そ (so)	こ (ko)	お (o)

Additional sounds (1)

ぱ (p a)	ば (b a)	だ (d a)	ざ (z a)	が (g a)
ぴ (p i)	び (b i)	ぢ (j i)	じ (j i)	ぎ (g i)
ぷ (p u)	ぶ (b u)	づ (z u)	ず (z u)	ぐ (g u)
ぺ (p e)	べ (b e)	で (d e)	ぜ (z e)	げ (g e)
ぽ (p o)	ぼ (b o)	ど (d o)	ぞ (z o)	ご (g o)

Additional sounds (2)

ひゃ	びゃ	じゃ	ぎゃ	りゃ	みゃ	ひゃ	にゃ	ちゃ	しゃ	きゃ
(p y a)	(b y a)	(j a)	(g y a)	(r y a)	(m y a)	(h y a)	(n y a)	(c h a)	(s h a)	(k y a)
ひゅ	びゅ	じゅ	ぎゅ	りゅ	みゅ	ひゅ	にゅ	ちゅ	しゅ	きゅ
(p y u)	(b y u)	(j u)	(g y u)	(r y u)	(m y u)	(h y u)	(n y u)	(c h u)	(s h u)	(k y u)
ひよ	びよ	じよ	ぎよ	りよ	みよ	ひよ	によ	ちよ	しよ	きよ
(p y o)	(b y o)	(j o)	(g y o)	(r y o)	(m y o)	(h y o)	(n y o)	(c h o)	(s h o)	(k y o)

のべやま

野 辺 山

NOBEYAMA

(長野県南佐久郡南牧村)

← しのかわかみ

SHINANO-KAWAKAMI

→ きよさと

KIYOSATO

Most common family names



- Most common family names
 - Satou (Satoh), Suzuki, Takahashi, Tanaka, Watanabe, Itou (Itoh), Nakamura, Yamamoto, Kobayashi, Saitou (Saitoh)
- Common boys names
 - Ichiro, Taro, Jiro, Saburo, Shiro, Goro
 - Daisuke, Jun, Takuya, Kenta, Yuuta, Naoki, Ken'ichi
- Common girls names
 - Yukiko, Yukie, Rieko, Reiko, Sumie, Momoko, Nanako
 - Yuki, Rie, Asuka, Haruka

Honorific suffixes

- San
 - General title of respect, like Mr, Mrs, Miss, Ms
 - Used with names, or occupations
- Sama
 - More respectful term, used, e.g., for customers
- Sensei
 - Used for teachers, doctors, experts
- Chan
 - Used for babies, children, girls
- Kun
 - Used for boys or those junior in rank



カタカナ Katakana

ワ ^w	ラ ^r	ヤ ^y	マ ^m	ハ ^h	ナ ⁿ	タ ^t	サ ^s	カ ^k	ア ^a
	リ		ミ	ヒ	ニ	チ	シ	キ	イ ⁱ
ヲ ^o	ル	ユ	ム	フ	ヌ	ツ	ス	ク	ウ ^u
	レ		メ	ヘ	ネ	テ	セ	ケ	エ ^e
ン ⁿ	ロ	ヨ	モ	ホ	ノ	ト	ソ	コ	オ ^o

Katakana

ン	ワ	ラ	ヤ	マ	ハ	ナ	タ	サ	カ	ア
n	wa	ra	ya	ma	ha	na	ta	sa	ka	a
		リ		ミ	ヒ	ニ	チ	シ	キ	イ
		ri		mi	hi	ni	chi	shi	ki	i
		ル	ユ	ム	フ	ヌ	ツ	ス	ク	ウ
		ru	yu	mu	fu	nu	tsu	su	ku	u
		レ		メ	ヘ	ネ	テ	セ	ケ	エ
		re		me	he	ne	te	se	ke	e
	ヲ	ロ	ヨ	モ	ホ	ノ	ト	ソ	コ	オ
	o	ro	yo	mo	ho	no	to	so	ko	o

Katakana words

- Ko-hi-
- Bi-ru
- Biru
- Bi-rusu
- Basu (which has three different meanings!)
- Resutoran
- Orenji juusu
- Go-ruden ui-ku (GW)
- Arubaito
- Natoriumu



Word order

- The Japanese language is SOV (Subject Object Verb)
 - As is Korean, but not Chinese
 - *(I) beach go. (I) book read.*
- English, in contrast, is SVO
 - As is Chinese, Spanish, French, Italian, ...
 - *I go to the beach. I read a book.*
- Japanese and Korean are sometimes classed as Altaic languages, alongside Turkish and Mongolian, with similarities to Uralic languages, which include Hungarian and Finnish!

Other aspects of the language

- Verb conjugation is generally simple
- The verb ending changes the meaning
 - Taberu (the “dictionary form” of the verb to eat)
 - Tabemasu = eat
 - Tabemasen = don’t eat
 - Tabetai = want to eat
- There is no singular/plural
- Subject/object markers (“ha” and “ga”) are as confusing as in English (“a” and “the”)

Numbers

1	ichi		6	roku
2	ni		7	shichi, nana
3	san		8	hachi
4	shi, yon		9	ku, kyuu
5	go		10	juu

- 11=juu-ichi, 20=ni-juu, 21=ni-juu-ichi
- Large numbers are given in units of 10^4 , not 10^3
- When counting, a suffix is added according to the type of thing being counted
- Four is the Japanese equivalent to 13!

The numbers from 1 to 10

一 二 三 四 五

六 七 八 九 十

More kanji

川

口

山

母

月

日

本

木

Even more kanji

小

中

大

木

林

森

Remembering difficult kanji

出

面

高

線

出

口

Some cultural differences

- Always wear clean socks.
- Don't get into a bath until you are clean.
- It's okay to slurp if eating noodles.
- When you're thirsty, fill someone else's glass.
- If you don't want to drink anymore, leave your glass full.
- Don't be offended if someone falls asleep.
- Don't blow your nose, especially on a handkerchief.
- When Japanese mean "yes" they say "yes", when Japanese mean "no" they say "yes".

Taxi etiquette

- Don't open the door!
- Sit in the back
- Don't close the door!
- Don't be shocked at the flag-fall
- At your destination, don't open the door!
- After you get out, don't close the door!

The year

- This year started as Heisei 30 and has become Reiwa 1
- Emperor Akihito began his reign in 1989 and abdicated this year
- Akihito succeeded his father, Hirohito, and is succeeded by his son, Naruhito
- The Emperor is not referred to by name in Japan
- The financial and school years run from April to March

Owari!

