

# Science Word List

English–Japanese Vocabulary for New York Grades 3–5

**Purpose.** This list supports Japanese-speaking students and families learning elementary science vocabulary in Grades 3–5. It covers life science, earth and space science, physical science, and science and engineering practices.

**How to use it.** Begin with the **Core** terms for classroom lessons and readings, then add the Useful terms as students meet them in experiments, diagrams, and science writing.

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## Term count by area

Area	Terms
Life Science	37
Earth and Space Science	37
Physical Science	29
Scientific Inquiry and Engineering	25
<b>Total</b>	<b>128</b>

# Life Science

English	日本語	よみ	Grade	Priority	Student note / use
living thing	生き物	いきもの	3-5	Core	an organism that is alive
organism	生物	せいぶつ	3-5	Core	formal term for a living thing
plant	植物	しょくぶつ	3-5	Core	
animal	動物	どうぶつ	3-5	Core	
habitat	生息地	せいそくち	3-5	Core	place where a living thing lives
environment	環境	かんきょう	3-5	Core	surroundings of a living thing
survive	生き残る	いきのこる	3-5	Core	stay alive
air	空気	くうき	3-5	Core	needed by many living things
water	水	みず	3-5	Core	needed by living things
nutrient	養分	ようぶん	3-5	Useful	food substance that helps living things grow
life cycle	生活環	せいかつかん	3-5	Core	stages of living things as they grow
grow	成長する	せいちょうする	3-5	Core	
develop	発達する	はったつする	3-5	Useful	change as an organism matures
seed	種	たね	3-5	Core	
root	根	ね	3-5	Core	part of a plant under the ground
stem	茎	くき	3-5	Core	
leaf	葉	は	3-5	Core	
flower	花	はな	3-5	Core	
offspring	子	こ	3-5	Useful	young of a plant or animal
reproduce	ふえる	ふえる	3-5	Useful	make more of the same kind
trait	特徴	とくちょう	3-5	Core	observable feature of a living thing
inherited trait	遺伝する特徴	いでんするとくちょう	3-5	Core	trait passed from parent to offspring
learned behavior	学習した行動	がくしゅうしたこうどう	3-5	Useful	behavior acquired from experience
adaptation	適応	てきおう	3-5	Useful	feature or behavior that helps survival
ecosystem	生態系	せいたいけい	3-5	Core	living things and their environment together
food chain	食物連鎖	しょくもつれんさ	3-5	Core	shows who eats whom
producer	生産者	せいさんしゃ	3-5	Core	usually a plant that makes its own food
consumer	消費者	しょうひしゃ	3-5	Core	living thing that eats plants or animals
decomposer	分解者	ぶんかいしゃ	3-5	Useful	living thing that breaks down dead matter
predator	捕食者	ほしょくしゃ	3-5	Useful	animal that hunts other animals
prey	えさになる動物	えさになるどうぶつ	3-5	Useful	animal that is hunted
extinct	絶滅した	ぜつめつした	3-5	Useful	no longer living anywhere on Earth
shelter	すみか	すみか	3-5	Core	place that helps an organism stay safe

sunlight	日光	にっこう	3-5	Core	light from the sun that helps plants grow
sprout	芽が出る	めがでる	3-5	Useful	begin to grow from a seed
camouflage	保護色	ほごしょく	3-5	Useful	color or pattern that helps an organism blend in
scavenger	死んだ生き物を食べる動物	しんだいきものをたべるどうぶつ	3-5	Useful	animal that eats dead plants or animals

## Earth and Space Science

English	日本語	よみ	Grade	Priority	Student note / use
weather	天気	てんき	3-5	Core	conditions outside over a short time
climate	気候	きこう	3-5	Core	usual weather over a long time
temperature	気温	きおん	3-5	Core	how hot or cold something is
forecast	予報	よほう	3-5	Core	prediction of upcoming weather
precipitation	降水	こうすい	3-5	Core	rain snow sleet or hail
water cycle	水の循環	みずのじゅんかん	3-5	Core	movement of water through Earth systems
evaporation	蒸発	じょうはつ	3-5	Core	liquid water changes to gas
condensation	凝結	ぎょうけつ	3-5	Core	water vapor changes to liquid
cloud	雲	くも	3-5	Core	
atmosphere	大気	たいき	3-5	Useful	layer of gases around Earth
wind	風	かぜ	3-5	Core	moving air
humidity	湿度	しつど	3-5	Useful	amount of water vapor in the air
rock	岩石	がんせき	3-5	Core	
soil	土	つち	3-5	Core	
sediment	たい積物	たいせきぶつ	3-5	Useful	small pieces of rock or soil
weathering	風化	ふうか	3-5	Core	breaking down rock into smaller pieces
erosion	侵食	しんしょく	3-5	Core	moving rock or soil from one place to another
deposit	たい積する	たいせきする	3-5	Useful	drop or lay down moved material
landform	地形	ちけい	3-5	Core	feature of Earth's surface
mountain	山	やま	3-5	Core	
valley	谷	たに	3-5	Useful	
plain	平野	へいや	3-5	Useful	large area of flat land
Sun	太陽	たいよう	3-5	Core	
Moon	月	つき	3-5	Core	
star	星	ほし	3-5	Core	
planet	惑星	わくせい	3-5	Core	
solar system	太陽系	たいようけい	3-5	Core	
rotate	自転する	じてんする	3-5	Core	spin on an axis
revolve	公転する	こうてんする	3-5	Core	move around another object
shadow	かげ	かげ	3-5	Core	dark area where light is blocked

pattern	きまり	きまり	3-5	Core	used for repeated natural events
weather map	天気図	てんきず	3-5	Useful	map that shows weather conditions in different places
thermometer	温度計	おんどけい	3-5	Core	tool used to measure temperature
anemometer	風速計	ふうそくけい	3-5	Useful	tool used to measure wind speed
sediment	たい積物	たいせきぶつ	3-5	Useful	small pieces of rock soil or sand moved by water wind or ice
landform	地形	ちけい	3-5	Core	natural feature on Earth's surface
constellation	星座	せいざ	3-5	Useful	group of stars that forms a pattern in the sky

## Physical Science

English	日本語	よみ	Grade	Priority	Student note / use
matter	物質	ぶっしつ	3-5	Core	anything that has mass and takes up space
solid	固体	こたい	3-5	Core	
liquid	液体	えきたい	3-5	Core	
gas	気体	きたい	3-5	Core	
property	性質	せいしつ	3-5	Core	describes what matter is like
mass	質量	しつりょう	3-5	Core	amount of matter in an object
volume	体積	たいせき	3-5	Core	amount of space matter takes up
texture	手ざわり	てざわり	3-5	Useful	how a surface feels
transparent	透明な	とうめいな	3-5	Core	lets most light pass through
translucent	半透明な	はんとうめいな	3-5	Useful	lets some light pass through
opaque	不透明な	ふとうめいな	3-5	Core	does not let light pass through
force	力	ちから	3-5	Core	a push or a pull
motion	運動	うんどう	3-5	Core	movement of an object
push	押す	おす	3-5	Core	
pull	引く	ひく	3-5	Core	
gravity	重力	じゅうりょく	3-5	Core	force that pulls objects toward Earth
friction	摩擦	まさつ	3-5	Useful	force that slows motion when surfaces rub
magnet	磁石	じしゃく	3-5	Core	
magnetic force	磁力	じりょく	3-5	Useful	force caused by magnets
energy	エネルギー	えねるぎー	3-5	Core	ability to cause change
light	光	ひかり	3-5	Core	
sound	音	おと	3-5	Core	
vibration	振動	しんどう	3-5	Useful	back and forth motion that makes sound
absorb	吸収する	きゅうしゅうする	3-5	Useful	take in a liquid gas or energy

dissolve	溶ける	とける	3-5	Core	mix into a liquid so it seems to disappear
mixture	混合物	こんごうぶつ	3-5	Useful	combination of two or more materials
balance	つり合い	つりあい	3-5	Useful	state when forces are even
electricity	電気	でんき	3-5	Core	form of energy that can make lights and machines work
heat	熱	ねつ	3-5	Core	energy that makes things warmer

## Scientific Inquiry and Engineering

English	日本語	よみ	Grade	Priority	Student note / use
observe	観察する	かんさつする	3-5	Core	use senses and tools to notice details
observation	観察	かんさつ	3-5	Core	what you notice and record
question	問い	とい	3-5	Core	starting point for an investigation
predict	予想する	よそうする	3-5	Core	say what you think will happen
investigate	調べる	しらべる	3-5	Core	carry out a science study
evidence	証拠	しょうこ	3-5	Core	information used to support an idea
measure	測る	はかる	3-5	Core	use a tool to find amount size or time
record data	データを記録する	データをきろくする	3-5	Core	write down observations and measurements
analyze	分析する	ぶんせきする	3-5	Useful	study data carefully
conclusion	結論	けつろん	3-5	Core	what the investigation shows
model	モデル	もでる	3-5	Core	representation used to explain or show an idea
pattern in data	データのきまり	データのきまり	3-5	Useful	regularity you notice in results
design	設計する	せつけいする	3-5	Core	plan how to solve a problem
problem	問題	もんだい	3-5	Core	thing that needs a solution
solution	解決策	かいけつさく	3-5	Core	answer to a design problem
material	材料	ざいりょう	3-5	Core	what something is made from
constraint	条件	じょうけん	3-5	Useful	limit you must work within
criteria	評価の条件	ひょうかのじょうけん	3-5	Useful	rules for judging whether a design works
test	試す	ためす	3-5	Core	check whether a design works
improve	改良する	かいはりょうする	3-5	Core	make a design work better
hypothesis	予想した考え	よそうしたかんがえ	3-5	Useful	possible explanation or answer to a science question
fair test	公平な実験	こうへいなじっけん	3-5	Core	test in which only one thing is changed at a time
table	表	ひょう	3-5	Core	organized chart for recording data

prototype	試作品	しさくひん	3-5	Useful	first model of a design to test and improve
redesign	設計し直す	せっけいしなおす	3-5	Useful	change a design after testing to make it work better

## Earth and Space Science (sorted)

English	日本語	よみ	Grade	Priority	Student note / use
landform	地形	ちけい	3-5	Core	natural feature on Earth's surface
sediment	たい積物	たいせきぶつ	3-5	Useful	small pieces of rock soil or sand moved by water wind or ice
deposit	たい積する	たいせきする	3-5	Useful	drop or lay down moved material
erosion	侵食	しんしょく	3-5	Core	moving rock or soil from one place to another
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weathering	風化	ふうか	3-5	Core	breaking down rock into smaller pieces
constellation	星座	せいざ	3-5	Useful	group of stars that forms a pattern in the sky
Moon	月	つき	3-5	Core	
pattern	きまり	きまり	3-5	Core	used for repeated natural events
planet	惑星	わくせい	3-5	Core	
revolve	公転する	こうてんする	3-5	Core	move around another object
rotate	自転する	じてんする	3-5	Core	spin on an axis
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leaf	葉	は	3-5	Core	
life cycle	生活環	せいかつかん	3-5	Core	stages of living things as they grow
offspring	子	こ	3-5	Useful	young of a plant or animal
reproduce	ふえる	ふえる	3-5	Useful	make more of the same kind
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trait	特徴	とくちょう	3-5	Core	observable feature of a living thing

## Physical Science (sorted)

English	日本語	よみ	Grade	Priority	Student note / use
balance	つり合い	つりあい	3-5	Useful	state when forces are even
electricity	電気	でんき	3-5	Core	form of energy that can make lights and machines work
energy	エネルギー	えねるぎー	3-5	Core	ability to cause change
force	力	ちから	3-5	Core	a push or a pull
friction	摩擦	まさつ	3-5	Useful	force that slows motion when surfaces rub
gravity	重力	じゅうりょく	3-5	Core	force that pulls objects toward Earth
heat	熱	ねつ	3-5	Core	energy that makes things warmer
light	光	ひかり	3-5	Core	
magnet	磁石	じしゃく	3-5	Core	
magnetic force	磁力	じりょく	3-5	Useful	force caused by magnets
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push	押す	おす	3-5	Core	
sound	音	おと	3-5	Core	
vibration	振動	しんどう	3-5	Useful	back and forth motion that makes sound
absorb	吸収する	きゅうしゅうする	3-5	Useful	take in a liquid gas or energy
dissolve	溶ける	とける	3-5	Core	mix into a liquid so it seems to disappear
gas	気体	きたい	3-5	Core	
liquid	液体	えきたい	3-5	Core	
mass	質量	しつりょう	3-5	Core	amount of matter in an object
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## Scientific Inquiry and Engineering (sorted)

English	日本語	よみ	Grade	Priority	Student note / use
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criteria	評価の条件	ひょうかのじょうけん	3-5	Useful	rules for judging whether a design works
design	設計する	せっけいする	3-5	Core	plan how to solve a problem
improve	改良する	かいりょうする	3-5	Core	make a design work better
material	材料	ざいりょう	3-5	Core	what something is made from
problem	問題	もんだい	3-5	Core	thing that needs a solution
prototype	試作品	しさくひん	3-5	Useful	first model of a design to test and improve
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solution	解決策	かいけつさく	3-5	Core	answer to a design problem
test	試す	ためす	3-5	Core	check whether a design works
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pattern in data	データのきまり	でーたのきまり	3-5	Useful	regularity you notice in results

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question	問い	とい	3-5	Core	starting point for an investigation
record data	データを記録する	データをきろくする	3-5	Core	write down observations and measurements
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