

Sentence Generator

This page is one possible grammar that can generate English sentences. You will also need to roll a die (one of a pair of dice) to generate random numbers. (Don't have one? Search for 'virtual die'.)

The phrase structure rules give options for how your sentence can turn out. Roll the die to choose a rule, or switch to the lexicon and roll for a word when you need one. Take the numbers you get — no cheating!

S							
🖸 through 🖽		$S \rightarrow NP VP$					
NP							
or 🖸	NP → det noun						
⊡ or ∷	NP → det AP noun						
🖸 or 🔛	$\text{NP} \rightarrow \text{det noun PP}$						
PP							
🖸 through 🔛		$PP \rightarrow prep NP$					

Phrase Structure Rules

VP						
O or C	VP → verb					
⊡ or ∷	VP → verb NP					
🖸 or 🔛	VP → verb PP					
AP						
O or C	$AP \rightarrow adj$					
🖸 or 🖸	AP → adj AP					

 $AP \rightarrow adv adj$

Lexicon

	det	noun	verb	adj	adv	prep
·	a	idea	likes	green	really	in
	an	table	eats	beautiful	quite	for
·	the	city	sleeps	useful	very	to
::	some	cat	wants	amazing	unusually	with
\mathbf{x}	this	person	walks	colourless	rather	near
	that	poem	gives	big	furiously	beyond

🖸 or 🔛

What to do:

- 1. Use this grammar to generate **two sentences**. Be sure to represent your sentence in the form of a tree. It's easier to keep track of the parts that way. Start with **S**.
- 2. How long could a sentence potentially be, using this grammar? Infinitely long, or just very long? How do you know?
- 3. Did this grammar generate any bad sentences? What exactly was wrong with the sentences? How could you fix this grammar so that it wouldn't make these mistakes?