



# How to use these token cutouts

These pages contain the text *Green Eggs and Ham* by Dr Seuss. Each **cutout** shows a **next word** paired with the **previous word** that came immediately before it in the original text.

Model vitals	
993 tokens	1.8 bits/token entropy
3.5 perplexity	3.45 branching factor

## Anatomy of a cutout



Every distinct word has its own colour. **Previous** words appear inside a coloured box (the word’s own colour as the background, with white text); the free-standing **next word** appears in plain coloured text. The same word always wears the same colour, whether you see it inside a box or free-standing. Two unrelated words can occasionally share a colour, so always verify the word itself matches—not just the colour.

## Setup

**Cut out the tokens** along the dotted lines and **spread them out** face-up on the table, with no overlap if possible. This is the “training” step: every (previous, next) combination from the original text is now a physical cutout sitting on your table.

## How to play: the matching game

To generate text, repeatedly find a cutout whose **previous word** matches the last word you’ve written, then **write its next word** onto your page. The word you just wrote becomes part of what you’ll match against next—that’s the chain.

## Worked example

**Step 1.** Pick any cutout to begin—say this one—and copy its previous word *and* its next word onto your page.

**Step 2.** Look at the last word you've written (*Sam*) and find a cutout whose previous word matches it. Write its next word.

**Step 3.** Repeat: find a cutout whose previous word matches the last word you've written, and add its next word.

Keep going—write as much or as little as you like.



that Sam

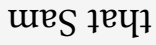
*the cutout*



Sam I




I am



that Sam



that Sam I



that Sam I am

*your page*

## Tips

**Use colour as a fast filter.** Scan by the rightmost previous-word box's colour first, then verify the actual word matches.

**Pick from many candidates by eye.** The more cutouts share the same previous word, the more often your eye lands on one—that's **weighted sampling** for free, and it's why some words follow others more often in your text.

**Put the cutout back** after using it—removing it would change the model's distribution next time round.

I I am am Sam Sam . I I am am Sam Sam .

. Sam Sam I I am am . that that Sam Sam I

I am am ! ! that that Sam Sam I I am am !

! I I do do not not like like that that Sam

Sam I I am am ! ! would would you you like

like green green eggs eggs and and ham

ham ? ? I I do do not not like like them

them , , Sam Sam I I am am . I I do do not

not like like green green eggs eggs and

and ham ham . would would you you like

you like would you would you like and ham . ham

eggs and green eggs like green not like

do not I do I am . I am I am Sam I , Sam , them

like them not like do not I do I do ? I ham ?

and ham eggs and green eggs like green

you like would you would you am I am I am Sam I

that Sam like that not like do not I do I

am I am I am Sam I that Sam I that am I am

Sam I that Sam . I am Sam I Sam . I am Sam

Sam . am Sam I am . Sam . am Sam I am I

like them them here here or or there there ?

? I I would would not not like like them

them here here or or there there . I I would

would not not like like them them anywhere

anywhere . I I do do not not like like green

green eggs eggs and and ham ham . I I do

do not not like like them them , , Sam Sam I

I am am . would would you you like

like them them in in a a house house ?

? would would you you like like them

like them you like would you ?

house ? a house in a them in like them

you like would you . would am . I am

Sam I , Sam , like them , not like do not

I do . I ham . and ham and eggs and green eggs

like green not like do not I do . I anywhere .

them anywhere like them not like would not

I would . I there . or there here or here them here

like them not like would not I would ? I

there ? or there here or them here like them

**them** with **with** a **a** mouse **mouse** ? **?** I **I** do

**do** not **not** like **like** them **them** in **in** a

**a** house **house** . **.** I **I** do **do** not **not** like

**like** them **them** with **with** a **a** mouse **mouse** .

**.** I **I** do **do** not **not** like **like** them **them** here

**here** or **or** there **there** . **.** I **I** do **do** not

**not** like **like** them **them** anywhere **anywhere** .

**.** I **I** do **do** not **not** like **like** green **green** eggs

**eggs** and **and** ham **ham** . **.** I **I** do **do** not

**not** like **like** them **them** , **,** Sam **Sam** I **I** am

I am Sam I , Sam , like them not like

do not I do I ham . and ham and eggs and

green eggs like green not like do not I do I

anywhere . them anywhere like them not like

do not I do I there . or there or here

them here like them not like do not I do I

mouse . a mouse with a them with like them

not like do not I do I house . a house

in a them in like them not like do not

I do ? I mouse ? a mouse with a them with

am . would you you eat eat them

them in in a a box box ? ? would would you

you eat eat them them with with a a fox

fox ? ? not not in in a a box box . . not

not with with a a fox fox . . not not in in a

a house house . . not not with with a a mouse

mouse . . I I would would not not eat

eat them them here here or or there there .

. I I would would not not eat eat them

them anywhere anywhere . . I I would

I would I  
I anywhere  
them anywhere

eat them  
not eat  
would not I  
I would I

there  
or there  
here or  
them here  
eat them

not eat  
would not I  
I would I  
mouse

a mouse  
with a  
not with  
house  
a house

in a  
not in  
not  
fox  
a fox  
with a  
not with

not  
box  
a box  
in a  
not in  
fox ?

a fox  
with a  
them  
eat them  
you eat

would you ?  
would ?  
a box ?  
in a  
them in

eat them  
you eat  
would you  
I would  
am

would not not eat eat green green eggs

eggs and and ham ham . I I do do not

not like like them them , , Sam Sam I I am

am . would would you you ? ? could

could you you ? ? in in a a car car ? ? eat

eat them them ! ! eat eat them them ! ! here

here they they are are . I I would would not

not , , could could not not , , in in a a car

car . you you may may like like them

them . you you will will see see . you

• you see • will see you will • you them

like them may like you may • you car

a car in a , in , not , could not , could , not

would not I would I • I are • they are here they

! here ! them ! eat them ! eat ! them ! eat them

? eat ? car ? a car in a ? in ? you ? could you

? could ? you ? would you • would am

I am Sam I , Sam , them , like them not like

do not I do • I ham • and ham and eggs and

green eggs eat green not eat would not

**you** may **may** like **like** them **them** in **in** a

**a** tree **tree** ! **!** I **I** would **would** not **not** ,

**,** could **could** not **not** in **in** a **a** tree **tree** .

**.** not **not** in **in** a **a** car **car** ! **!** you **you** let

**let** me **me** be **be** . **.** I **I** do **do** not **not** like

**like** them **them** in **in** a **a** box **box** . **.** I **I** do

**do** not **not** like **like** them **them** with **with** a

**a** fox **fox** . **.** I **I** do **do** not **not** like **like** them

**them** in **in** a **a** house **house** . **.** I **I** do **do** not

**not** like **like** them **them** with **with** a **a** mouse

a mouse with a them with like them not like

do not I do I house a house in a them in

like them not like do not I do I fox a fox

with a them with like them not like do not

I do I box a box in a them in like them

not like do not I do I be me be let me

you let you car a car in a not in not

tree a tree in a not in could not could

not would not I would I tree a tree

in a them in like them may like you may

mouse . I I do do not not like like them

them here here or or there there . I I do

do not not like like them them anywhere

anywhere . I I do do not not like like green

green eggs eggs and and ham ham . I I do

do not not like like them them , , Sam Sam I

I am am . a a train train ! ! a a train

train ! ! a a train train ! ! a a train train !

! could could you you , , would would you

you on on a a train train ? ? not not on on a

on a not on ? not ? train ? a train a on you on

would you , would you , could you could

train ! a train ! a train ! a train ! a train !

a train ! a train ! a train ! a train ! a train ! I am . I am

Sam I , Sam , like them , like them not like do not

I do I ham . and ham and eggs and green eggs

like green not like do not I do I anywhere .

them anywhere like them not like do not

I do I there . or there or here them here

like them not like do not I do I mouse .

a train **train** ! ! not **not** in **in** a a tree **tree** !

! not **not** in **in** a a car **car** ! ! Sam **Sam** ! ! let

let me **me** be **be** ! ! I **I** would **would** not **not** ,

, could **could** not **not** , , in **in** a a box **box** .

. I **I** would **would** not **not** , , could **could** not

**not** , , with **with** a a fox **fox** . . I **I** will

**will** not **not** eat **eat** them **them** in **in** a

a house **house** . . I **I** will **will** not **not** eat

eat them **them** with **with** a a mouse **mouse** .

. I **I** will **will** not **not** eat **eat** them **them** here

them here eat them not eat will not I will I

mouse a mouse with a them with eat them

not eat will not I will I house a house

in a them in eat them not eat will not

I will I fox a fox with a , with not ,

could not , could not would not I would I

box a box in a , in not , could not , could

not , would not I would I be me be let me

! let Sam ! Sam ! car ! a car in a not in ! not

tree ! a tree in a not in ! not train ! a train

here or or there there . I I will will not

not eat eat them them anywhere anywhere .

. I I do do not not eat eat green green eggs

eggs and and ham ham . I I do do not

not like like them them , , Sam Sam I I am

am . say say ! ! in in the the dark dark ?

? here here in in the the dark dark ! ! would

would you you , , could could you you , , in

in the the dark dark ? ? I I would would not

not , , could could not not , , in in the

will not I will I there or there here or

anywhere them anywhere eat them not eat

green eggs eat green not eat do not I do I

do not I do I ham and ham eggs and

I am Sam I Sam I them like them not like

dark? the dark in the in say say in am

! would dark! the dark in the here in ? here

, in you, could you, could you, would you

would not I would I dark? the dark in the

in the in not, could not, could not

the dark dark . would would you you ,  
, could could you you , , in in the the rain  
rain ? ? I I would would not not , , could  
could not not in in the the rain rain . . not  
not in in the the dark dark . . not not on  
on a a train train . . not not in in a a car  
car . . not not in in a a tree tree . . I I do  
do not not like like them them , , Sam Sam ,  
, you you see see . . not not in in a a house  
house . . not not in in a a box box . . not

• not in a box • not in a house •

a house in a not in • not see • you see , you

Sam , Sam , like them not like do not

I do I tree • a tree in a not in • not car •

a car in a not in • not train • a train on a

not on • not dark • the dark in the not in

• not rain • the rain in the not in could not

could , could , would not I would ? I rain ?

the rain in the , in you , could you , could

you , would you • would dark • the dark

not with with a a mouse mouse . not

not with with a a fox fox . I I will will not

not eat eat them them here here or or there

there . I I do do not not like like them

them anywhere anywhere ! ! you you do

do not not like like green green eggs eggs and

and ham ham ? ? I I do do not not like

like them them , , Sam Sam I I am am .

. could could you you , , would would you

you , , with with a a goat goat ? ? I I would

I would I ? I goat ? a goat with a with you ,

would you , would you , you could you could

am . I am I Sam I , Sam them , like them

not like do not I do ? I ham ? and ham

eggs and green eggs like green not like do not

you do ! you anywhere ! them anywhere

like them not like do not I do I there .

or there here or them here eat them not eat

will not I will I . I fox . a fox with a not with

not mouse . a mouse with a not with

would not not, , could could not not with

with a a goat goat ! ! would would you you ,

, could could you you , , on on a a boat

boat ? ? I I could could not not , , would

would not not , , on on a a boat boat . . I

I will will not not , , will will not not , , with

with a a goat goat . . I I will will not not eat

eat them them in in the the rain rain . . not

not in in the the dark dark ! ! not not in

in a a tree tree ! ! not not in in a a car car !

car ! a car in a in a not ! not in a in a tree ! a tree in a

not in ! not in the dark ! the dark in the not in

! not rain . the rain in the them in eat them

not eat will not I will I ! I goat . a goat with a

, with , not , will not , will , not , will I will

I ! I boat . a boat on a , on , not , would not

, would , not , could not I could ? I boat ?

a boat on a , on you , could you , could

you , would you ! would goat ! a goat with a

not with could not , could , not , would not

! you you let let me me be be ! ! I I do

do not not like like them them in in a a box

box . . I I do do not not like like them

them with with a a fox fox . . I I will

will not not eat eat them them in in a

a house house . . I I do do not not like

like them them with with a a mouse mouse .

. I I do do not not like like them them here

here or or there there . . I I do do not

not like like them them anywhere anywhere .

anywhere · them anywhere like them not like

do not I do I I there · or there here or

them here like them not like do not I do I I

mouse · a mouse with a them with like them

not like do not I do I I house · a house

in a them in eat them not eat will not

I will I I fox · a fox with a them with

like them not like do not I do I I box ·

a box in a them in like them not like do not

I do I I be I me be let me you let I you

. I I do do not not like like green green eggs

eggs and and ham ham ! ! I I do do not

not like like them them , , Sam Sam I I am

am . . you you do do not not like like them

them . . so so you you say say . . try

try them them ! ! try try them them ! ! and

and you you may may . . try try them

them and and you you may may , , I I say

say . . Sam Sam ! ! If If you you let let me

me be be , , I I will will try try them them .

them · try them will try I will I ; I be , me be

let me you let If you If Sam ! Sam ! Sam say ·

I say , I may , you may and you them and

try them · try may you may and you

! and them ! try them ! try them ! try them

· try say · you say so you so them ·

like them not like do not you do you am ·

I am Sam I , Sam , like them not like

do not I do I ham ! and ham and eggs and

green eggs like green not like do not I do · I

. you **you** will **will** see **see** . . . . and

**and** he **he** tries **tries** them **them** . . . say

**say** ! **!** I **I** like **like** green **green** eggs **eggs** and

**and** ham **ham** ! **!** I **I** do **do** ! **!** I **I** like

**like** them **them** , , Sam **Sam** I **I** am **am** !

**!** and **and** I **I** would **would** eat **eat** them

**them** in **in** a **a** boat **boat** . . and **and** I

**I** would **would** eat **eat** them **them** with **with** a

**a** goat **goat** . . and **and** I **I** will **will** eat

**eat** them **them** in **in** the **the** rain **rain** . . and

and rain the rain in the in them in eat them

will eat I will and I and I a goat

with a them with eat them would eat I would

and I and I a boat in a them in

eat them would eat I would and I and I

am I am Sam I Sam I like them

I like I do I do I ham and ham

eggs and green eggs like green I like I say

say he tries them he tries and he

and see will see you will you

**and** in **in** the **the** dark **dark** . **.** and **and** on

**on** a **a** train **train** . **.** and **and** in **in** a **a** car

**car** . **.** and **and** in **in** a **a** tree **tree** . **.** they

**they** are **are** so **so** good **good** , **,** so **so** good

**good** , **,** you **you** see **see** ! **!** so **so** I **I** will

**will** eat **eat** them **them** in **in** a **a** box **box** .

**.** and **and** I **I** will **will** eat **eat** them **them** with

**with** a **a** fox **fox** . **.** and **and** I **I** will **will** eat

**eat** them **them** in **in** a **a** house **house** . **.** and

**and** I **I** will **will** eat **eat** them **them** with

them with eat them will eat I will and I

and house a house in a them in eat them

will eat I will and I and fox a fox with a

them with eat them will eat I will and I and

box a box in a them in eat them will eat

I will so I so see you see you good

so good so good are so they are

they tree a tree in a and in and car

a car in a and in and train a train on a

and on and dark the dark in the and in

**with** a **a** mouse **mouse** . **.** and **and** I **I** will

**will** eat **eat** them **them** here **here** and

**and** there **there** . **.** say **say** ! **!** I **I** will **will** eat

eat them **them** anywhere **anywhere** ! **!** I **I** do

**do** so **so** like **like** green **green** eggs **eggs** and

**and** ham **ham** ! **!** Thank **Thank** you **you** !

**!** Thank **Thank** you **you** , **,** Sam **Sam** I **I** am

**am** .

I will and I and I will with a mouse

here and them here eat them will eat

will eat I will I say I say there and there

I do I anywhere ! them anywhere eat them

eggs and green eggs like green so like do so

you ! Thank you ! Thank ham ! and ham

I am Sam I , Sam you , Thank you ! Thank

am