

Search sheets: how to run the activity



The pages after this one are 17 **search sheets**, dealt from *The Tale of Peter Rabbit* by Beatrix Potter. Print them one-sided and hand out **one sheet per person**; every sheet is different, and nothing needs cutting out. Each holds 66 **token pairs**: a **next token** with the **previous token** that came before it in the text.

Match the room to the sheets, not the other way round. More people than sheets: print the whole set again, once per extra roomful. Every count multiplies equally, so the proportions — which is all the model is — hold. Fewer: hand the spares out anyway, two or three to a person. A sheet nobody holds is a hole in the model.

In **for supper**, the boxed token is the context and *supper* is the next token. A token keeps its colour wherever it appears, so say the colour as you call one out — “who has *supper*? it’s a red one” — and the room can scan by colour before reading. With 8 colours and far more tokens, a colour narrows the search rather than settling it.

black **grey** **red** **brown** **green** **blue** **purple** **magenta**

Running a round

Seed the board: someone reads out any token pair from their sheet, boxed token first, and both go up — the room supplies the beginning too. Then, each round:

1. **Call out the last token** on the board.
2. **Hands up** from everyone holding a matching token pair — one hand each.
3. **Pick a raised hand at random** — whoever shouts first is the fastest reader, not a sample of the text — and ask for its next token.
4. The scribe writes that token up. It is part of the next context. Repeat.

What to watch for

The hands are the probability distribution. Every token pair sits with exactly one person, so a common continuation puts more hands in the air than a rare one. Nobody has to explain weighted sampling; the room performs it.

Nobody holds the model. No single sheet can continue the text on its own. One hand is not a stall — but no hands at all means an empty seat, so reseed from any token pair and say why.

1123 tokens, 388 unique · 2.25 bits/token · perplexity 4.8 · branching factor 2.32

Worked example

Start anywhere. Someone reads out a token pair — say this one — and both its tokens go on the board.

Round 1. Call out **supper** — the last token on the board. A sheet across the room matches it, and that person reads out ..

Round 2. Call out . — the last token on the board. A sheet across the room matches it, and that person reads out *Peter*.

Keep going for as long as you like. What the room writes will sound like *The Tale of Peter Rabbit* without ever repeating it — that is the model generating, not the corpus being read out.

the token pair that answers

for **supper**

supper .

. *Peter*

on the board

for supper

for supper .

for supper . Peter

for supper was the if he tired that
, scratch crow to on his he got
the gate there ; , and Mr .
and calling towards Peter very fast carrying peas
some black . Peter such a Peter scuttered
time there net , , who planting out
, went . his lost one , carrying
quietly off a rake twitched as McGregor was
little bunnies . then scritch . frightened ;
noise of thing to but Flopsy cat was
to bed to Peter a dose his water
the floor was busy he might it was
blackbirds . into mischief the shoes wood .
jumped into and milk and climbed flopped down
rabbit took room for never stopped had bread
. Flopsy Kertyschoo ! among the potatoes .
garden . radishes ;

was after sand bank Peter was . rabbit
 leaving he saw a very . rabbit
 towards the the baker's and got had done
 McGregor caught too small alive .
 over carefully very quietly to frighten pair of
 the least for some ate some , Cotton
 time , it was much water a window
 whom should on the and jumped most dreadfully
 into the if it fortnight ! way to
 he tried old mouse speaking to tea ;
 jumped up to Mr took a . his
 an old the nice slipped underneath
 . Peter was very little rabbit squeezed under
 some parsley Peter , Flopsy , there were
 , and along , Mr . garden :
 , but thing he stone doorstep and looking
 but suddenly root of his cousin no time

find his the gate garden , Peter ;
 but don't had lost was tired , and
 gold fish old Mrs time . his mother
 along a would have ate some a gooseberry
 in great the large staring at , and
 into the over the of breath bushes .
 little Rabbits and then and beyond bunnies ,
 for he way straight say that McGregor .
 floor of no room . then Flopsy ,
 it best an accident lane to to look
 very damp Peter , , and some gold
 . McGregor . McGregor sitting in still ,
 began to on four umbrella , was out
 locked , , and the bushes he was
 running or . but to squeeze he went
 least idea Mr . you may rake and
 a wheelbarrow sand on

to him altogether if somewhere in he found
was the Bunny . had not for a
I think some camomile Peter thought running after
pie by lane , McGregor hoeing
, and a sand a pond began to
without speaking very naughty to go
carefully , old Mrs , if and the
, and water in on his by some
Peter asked the window safe at in a
four legs the tool his hands and out
Flopsy , . Mr , Mopsy . McGregor
Mr . over the only shook garden ,
tool shed into Mr it . sorry to
he became bushes . eyes . my dears
turn them way to Also he . Peter
of a caught sight the wood was so
. Also amongst the time he came up

might have he ate began to very still
 sobs were jacket . garden , , and
 was somewhere Peter , came to some French
 to turn French beans dears , way back
 Mr . the tip Peter sat sight of
 great excitement it was the evening
 what he by the cans . in it
 running in bread and under each water cans
 caught by and Peter the little , and
 a cucumber and Cotton , and four little
 I am plants . top of , and
 tool shed she only climbed upon hung up
 wall ; nothing happened Father had
 had an across the was staring over .
 . but his work beans ; . it
 for a a pie to his of his
 . he perhaps hidden McGregor , he could

the blackbirds brown bread baker's . bed time
more and shed , to exert Peter had
she sat through the tool shed Peter was
about , came out . McGregor the wood
a scare out young his shoes Cotton tail
very big , and bread and feeling rather
, going McGregor hung Mr . all round
gooseberry net of running was turned the other
hoeing onions sieve , he rushed a time
but now . McGregor for lost by Mrs
Mrs . beans to , but , but
answer . . an ; and and pair
it would soft sand he flopped running as
at some in the under the I am
one of and some buns . jacket and
filled his their names : but round .
to say fast as

the top bed , Mr . McGregor's
 quite close was very sparrows , , scratch
 their mother Cotton tail at the calling out
 found a very , the stone about cats
 or down lived with shed , fright ,
 looked behind tears ; he heard one table
 and more he had all over pond where
 tried to get into : your to hide
 . Mr just in ; he loaf of
 out of she gave his way jacket with
 Once upon but Mr gate , of shoes
 to rest . and first he the tool
 a can now run Mrs . Peter sneezed
 Peter got damp with , said meet but
 straight away round the in time and then
 more puzzled McGregor ! fast , , but
 a time , Mopsy

who jumped became more back towards shed big
 doorstep, peeped over out of a blue
 outside the Mrs. off the first thing
 of Peter was put gate! very well
 don't get quite sure young cabbages or looked
 jacket and McGregor's garden he had
 at last the fields said old been a
 going lippity, along cry. the cabbages
 . Peter, you in a, but
 Cottontail, Mr. wondered what straight walk
 the wheelbarrow; he she wondered
 but presently and don't scuttered underneath
 tried to to the his eyes waving a
 and the have been . McGregor now and
 one morning knees planting . They Stop thief
 him was shoes that, ran Peter did
 foot upon puzzled. naughty, he was
 to her

the end shed , now my . she
 jacket behind . McGregor's rest ; sure that
 was safe them , out . , she
 but Peter at bed don't go mischief .
 to the ; but with their back was
 thief ! straight across second little , he
 gate , he went good little and went
 hidden underneath not answer have got
 basket and the garden sick , as fast
 shut his , as should he shoes among
 brass buttons can . were alive upon the
 and ran who was her umbrella she could
 his sobs made some , perhaps a loaf
 of a him . . McGregor care .
 ! Mr in the Peter ! going out
 close to implored him five currant quite new
 McGregor's garden he intended to be

gate . she had can . and trembling
 and squeezed with sitting , quite he ran
 buttons on done with squeeze underneath
 shoes for he came think he not had
 thought it them over back to idea which
 ; and fish , as if up with
 was running blackberries for corner , end of
 lippity lippity to go , underneath him till
 gather blackberries the garden , who
 lettuces and large buttons that Peter in the
 Peter wriggled ! one his foot were Flopsy
 . now after Peter beyond him her head
 upon Peter out just but his at him
 ran straight spoonful to who flew saw was
 to cry away altogether a door . presently
 , upsetting friendly sparrows underneath .
 well during and knees . I of a
 the wood

lippity not he was tail twitched till he
 underneath the a straight her the as nothing
 she bought , who to wander and there
 ran on the second ; and up the
 with brass , feeling that Peter buttons ,
 of her gate ! , and were four
 currant buns hide in in and run along
 who were evening . away without taken at
 was on the potatoes not very large pea
 upon a after a clothes . but he
 faster , and five . after him .
 cousin , his back supper . his
 out , and was wander about window ,
 stopped running , waving he slipped
 blackberries : Peter began . he to the
 ! I back to got caught went back
 nice soft peas and . he

away to to pop Mopsy , ran after
 her family out , were good bought a
 each . but Peter in that window was
 he began sat down himself . after
 went faster Peter never currant bushes , he
 tail had the gate and made was locked
 him to that he up for a fortnight
 ! Mr r ritch he was to her
 of him fields or his mother run into
 scratch , with fright . Peter got home
 and he ; but Benjamin Bunny
 . McGregor after him . McGregor , which
 had heard down the as he , whom
 underneath the , but did not look for
 morning , intended to and started cabbages ,
 upon the not unfortunately turned towards
 the corner flower pot work . fir tree

Rabbits , Mopsy , and Cottontail he came
 then he the rabbit put him mother was
 with his underneath the and beans go ,
 , scritch him , . it . the
 not very , and , looking other shoe
 scratch , his jacket tree . went to
 leaving his up and sat very bank ,
 fir tree looking all himself up ! Peter
 Peter gave her mouth he lost down upon
 of brown upon a got down in a
 pop upon that I but round cabbages ,
 tail , to find scr r door in
 ; but the big was a to a
 may go out over after Peter were overheard
 heard the shook her and shut had such
 . presently a hoe am going . a
 your Father , who

head at new . Peter was got away
 , but and she . he from his
 heard about had not and then ! first
 a white ritch , of a and tried
 Mr . he began breath and underneath a
 down very him at went back camomile tea
 , and . the frighten the his clothes
 looking under cooking ; put his mouth that
 am sorry tree . . now asked her
 accident there ; he . he , and
 with a but it to him big fir
 the gate the first in , , very
 mother in then old names were go into
 that she presently Peter a wall flew to
 not care was no milk and forgotten the
 McGregor was Mopsy , after losing he jumped
 her ; white cat

be taken not the rabbit to blue jacket
 behind some mother put the root but Peter
 could go presently , sneezed Kertyschoo
 some radishes went down excitement , beautiful thing
 They lived wriggled out he went , Mopsy
 to gather table spoonful his jacket dose of
 he had . Mr ! Peter rushed all
 the lane in a . but and he
 the way her tail had so go .
 . it , he during the ; he
 and blackberries wheelbarrow and
 a sieve , he . Mr that Peter
 tip of so much was quite a large
 put in little jacket him in overheard by
 which he Peter . down the then the
 McGregor was , Stop of it Mr .
 it were fat little and shed big tears
 frame ,

pea in some lettuces the lane to the
 , for go away but she he meet
 , so he had cucumber frame
 then he ; and the garden gave a
 was Mr rather sick lost , went through
 Peter . could not suddenly , where Mr
 onions . Mr . the noise it to
 down to busy cooking in no little Benjamin
 pot . losing them . and and implored
 rushed into behind him a flower McGregor filled
 was too presently , him in small for
 a beautiful and her which way big fir
 . McGregor dreadfully frightened into a
 so that wheelbarrow ; that can he was
 , and shoe amongst . McGregor exert himself
 had forgotten . she of the black currant
 , and and peeped wood to rabbit one

gave himself so tired cats from into a
 and rushed there was . he behind him
 lost in tired of little jacket scare crow
 hoe scr had not happened , Peter ,
 go into walk behind best to some friendly
 him to . he time . McGregor came
 , and hands and he ate and went
 if it upsetting three ; she , he
 the gate started running . Peter it had
 the way a basket . Peter was most
 unfortunately run the tool mouse was
 Mr . , little but he parsley .
 for Mr three plants a fat legs and
 and their wood outside , quite then ,
 in her jumped out to put home to
 rabbit hole he had was not last in
 family in hole and trembling with