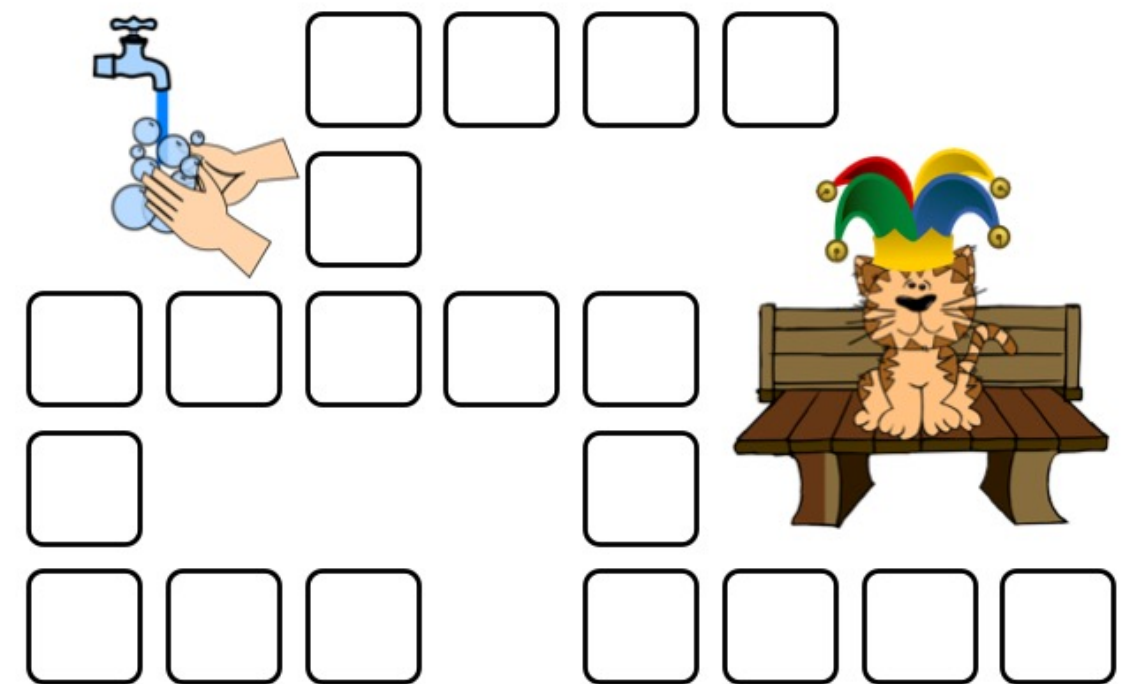


How to solve a **Kriss-Kross:** an introduction to logical thinking

Paul Curzon
Queen Mary University of London



3 letters

cat

hat

sat

tap

4 letters

snap

trap

5 letters

catch

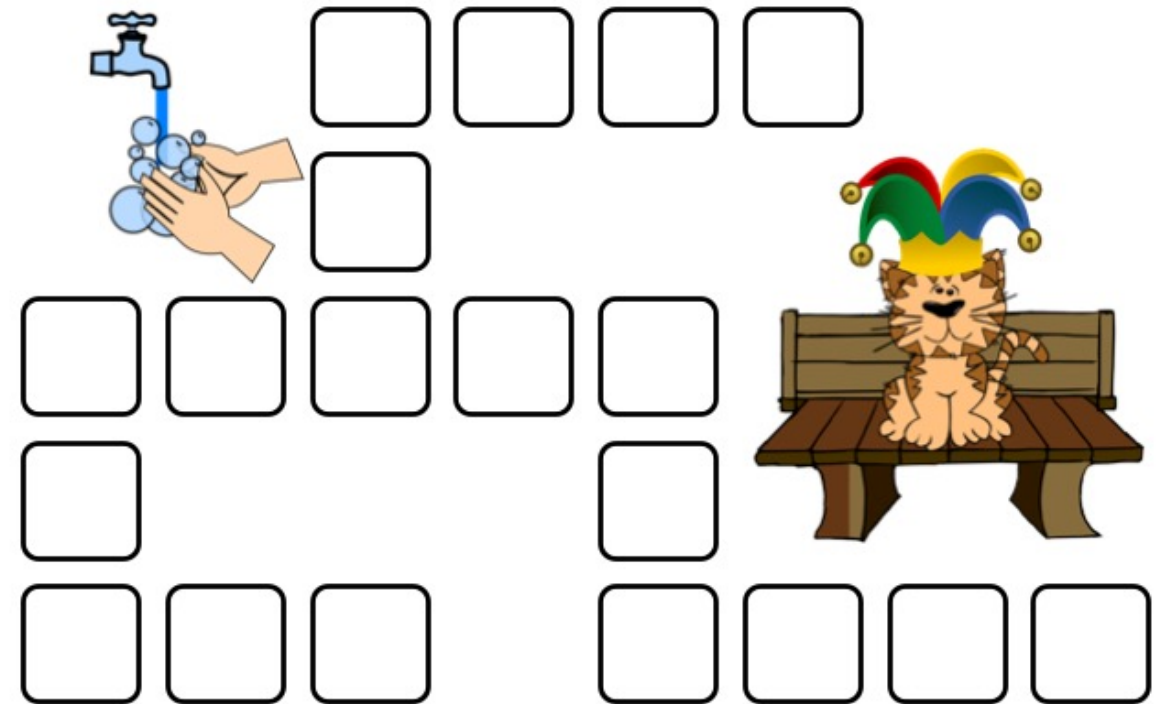


Solving Problems through Logical Thinking

- Logical thinking is just about thinking clearly and being careful.
- Look for **clues that are useful now**.
- Some clues won't be useful yet. Just be patient! You just need other clues first.
- Check and double check.

Solving Kriss-Kross

- A good clue to look for first ...
- Find a word length that has only one word of that length



3 letters

cat
hat
sat
tap

4 letters

snap
trap

5 letters

catch

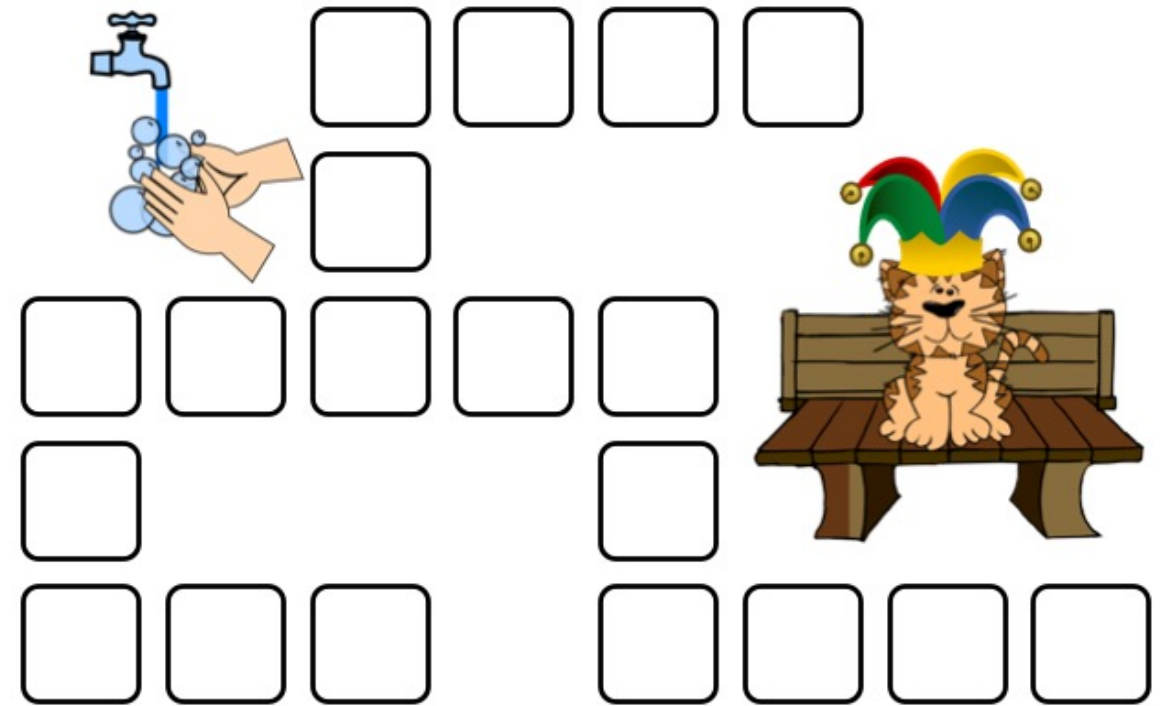


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- Find a word length that has only one word of that length



3 letters

cat
hat
sat
tap

4 letters

snap
trap

5 letters

catch

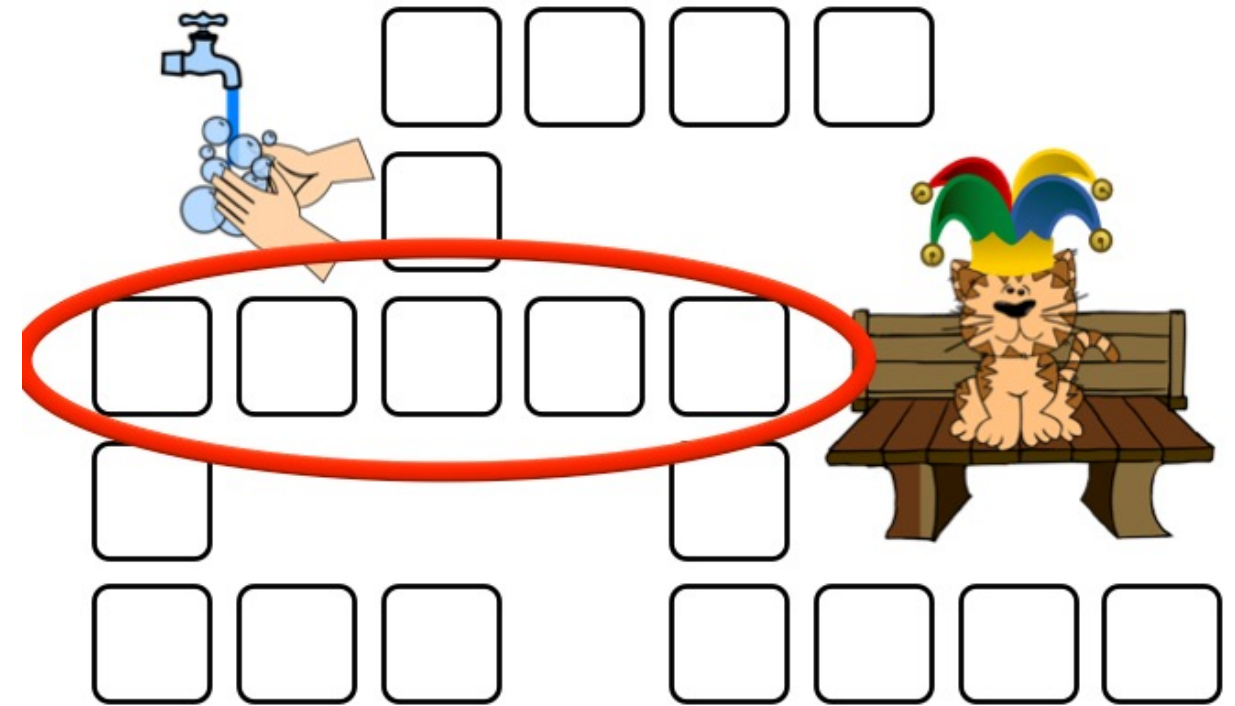


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- Then find a word in the grid of that length



3 letters

cat
hat
sat
tap

4 letters

snap
trap

5 letters

catch

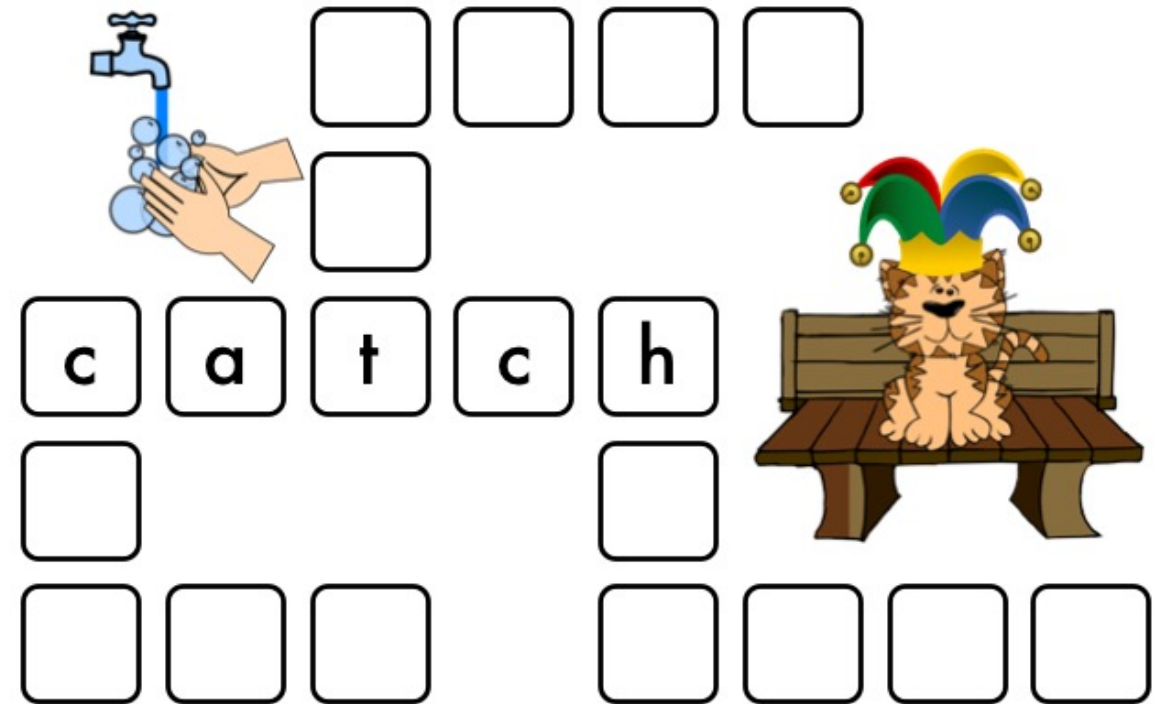


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- and fill in the word



3 letters

cat
hat
sat
tap

4 letters

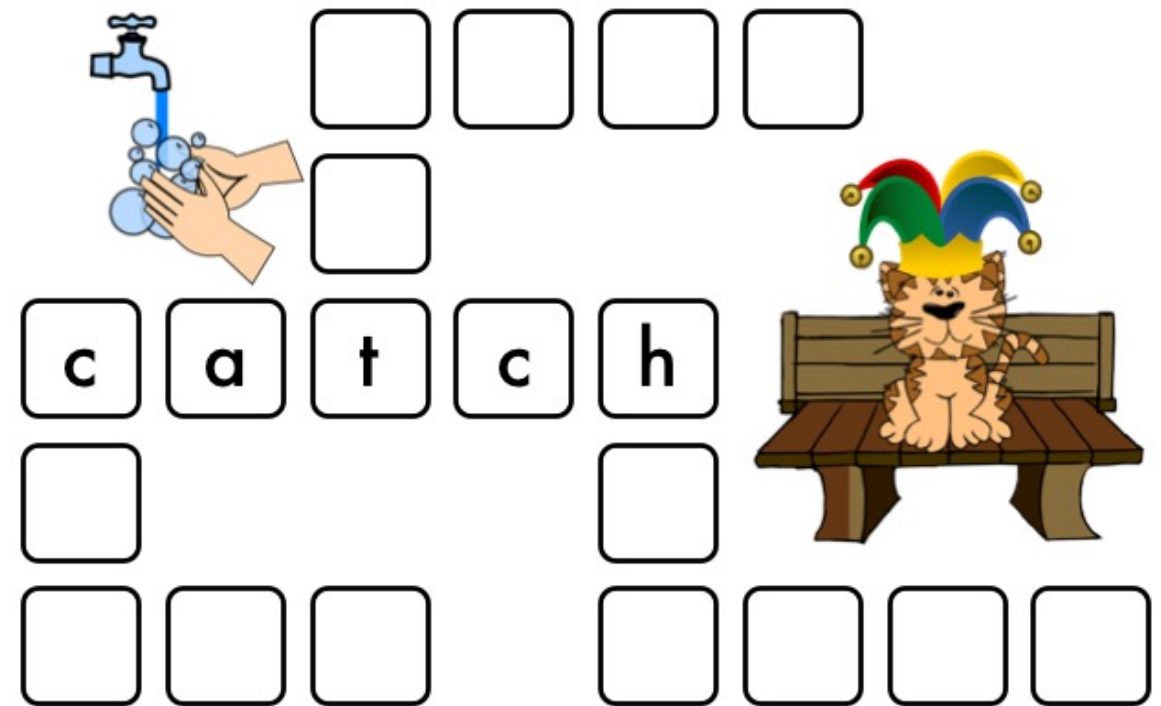
snap
trap

5 letters

catch



- then cross the word off ...
- so you know which you have used!



3 letters

cat
hat
sat
tap

4 letters

snap
trap

5 letters

~~catch~~

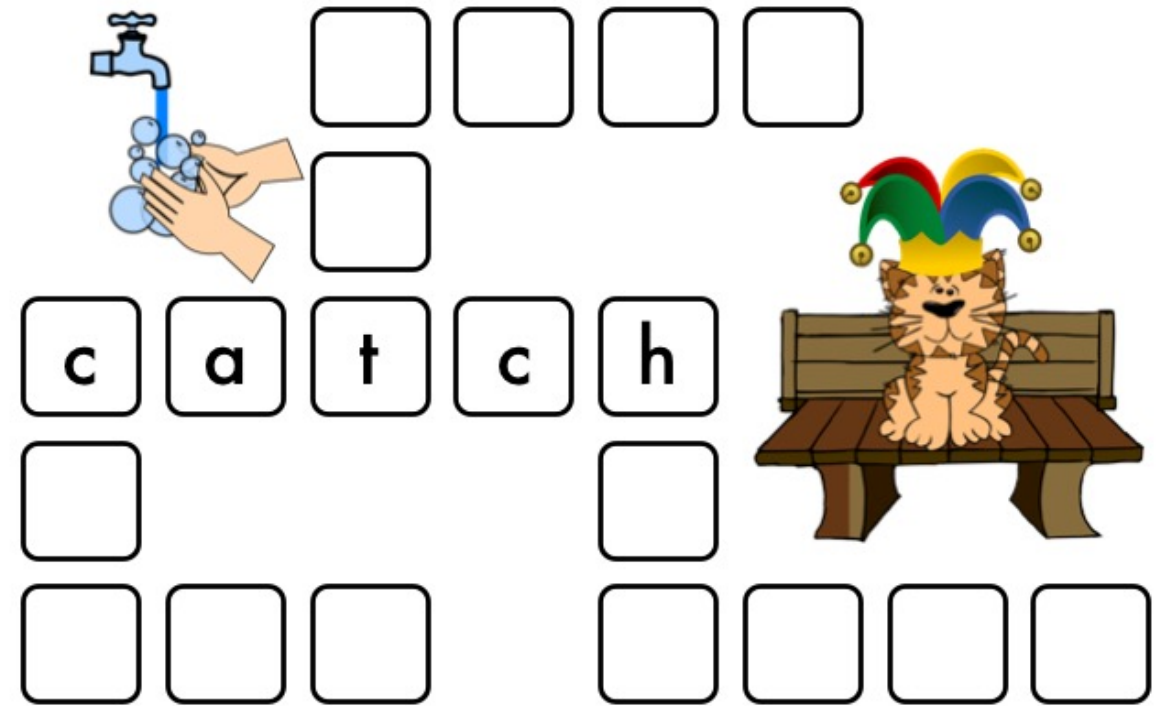


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- Now look for more clues.
- Which words in the grid have letters that mean only one word fits?



3 letters

cat
hat
sat
tap

4 letters

snap
trap

5 letters

~~catch~~

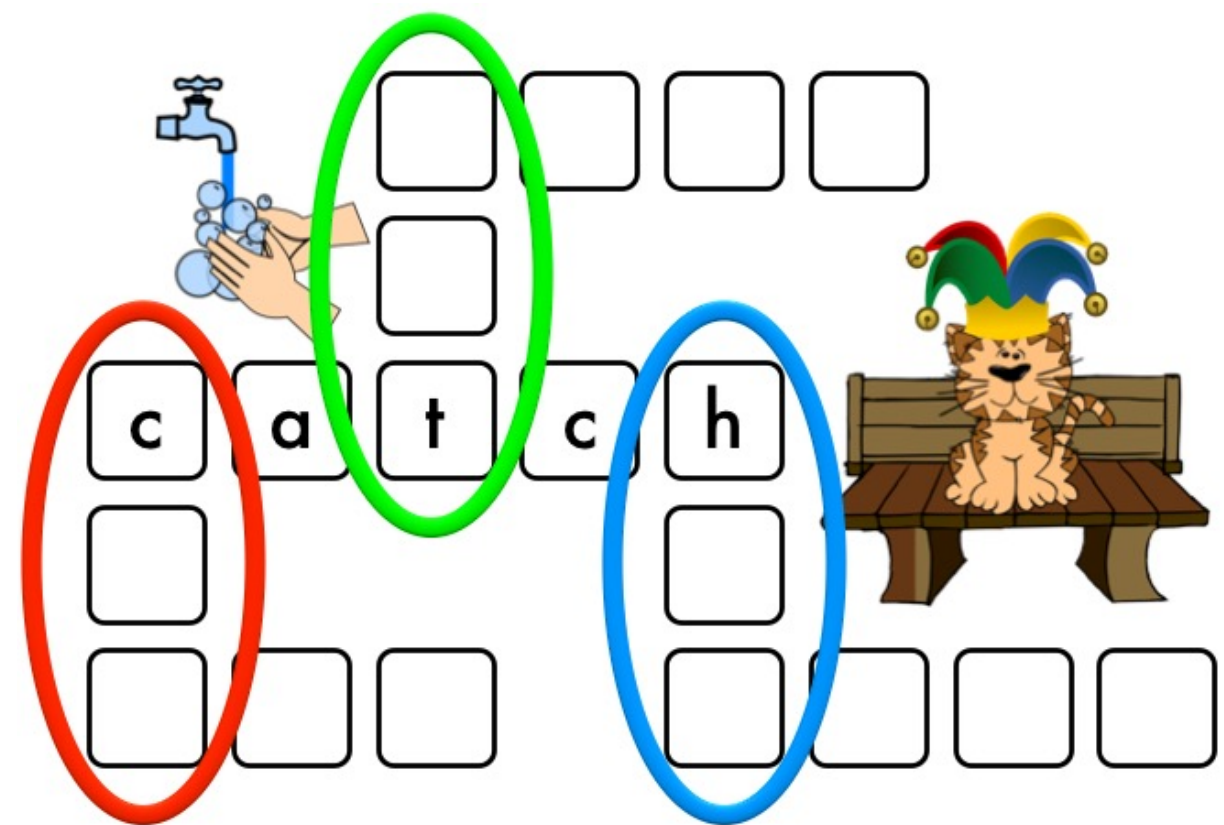


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- Lots end in **t** so that is no help
- but only one 3-letter word starts with **c**
- (only one starts with **h** so that's possible too)



3 letters

cat

hat

sat

tap

4 letters

snap

trap

5 letters

~~catch~~

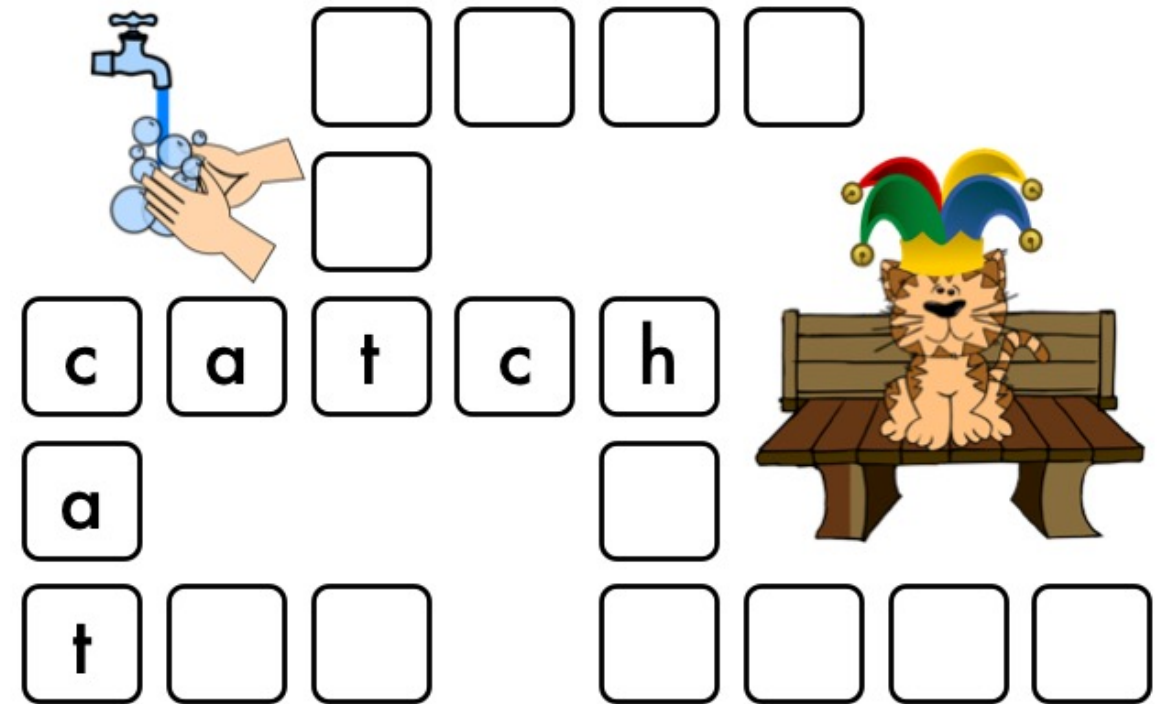


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- Fill in that word
(**cat**)
- Then cross it off.



3 letters

~~cat~~

hat

sat

tap

4 letters

snap

trap

5 letters

~~catch~~

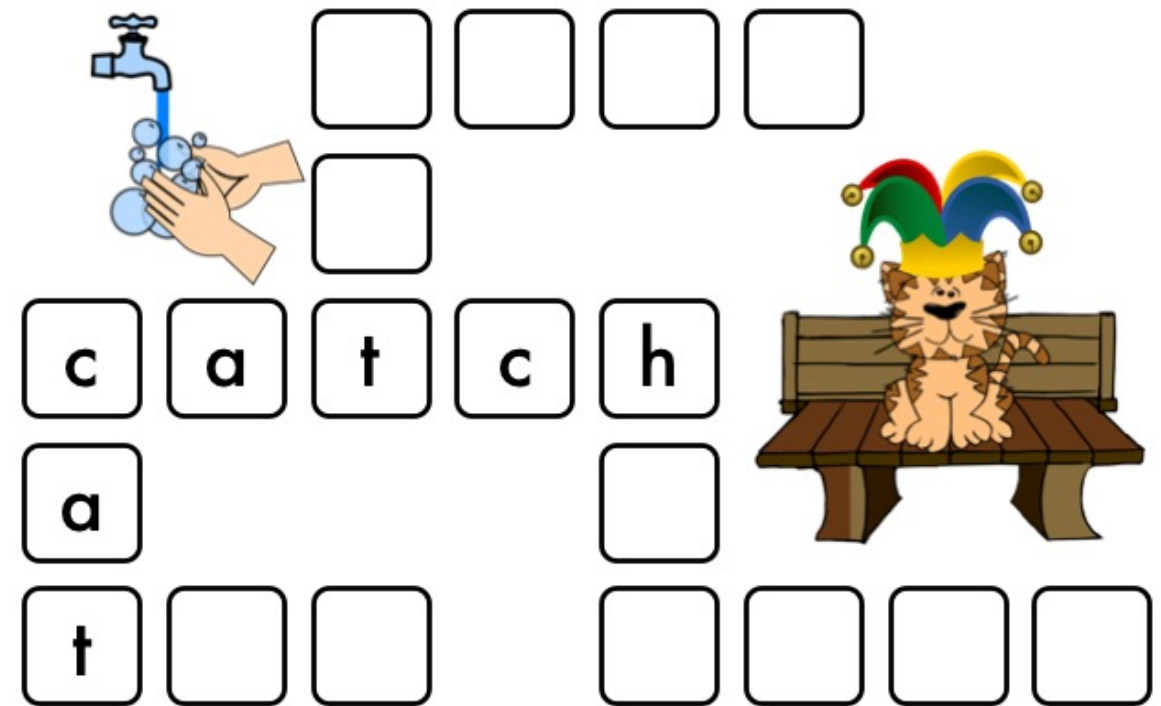


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- Now what other clues mean only one word fits?



3 letters

~~cat~~

hat

sat

tap

4 letters

snap

trap

5 letters

~~catch~~

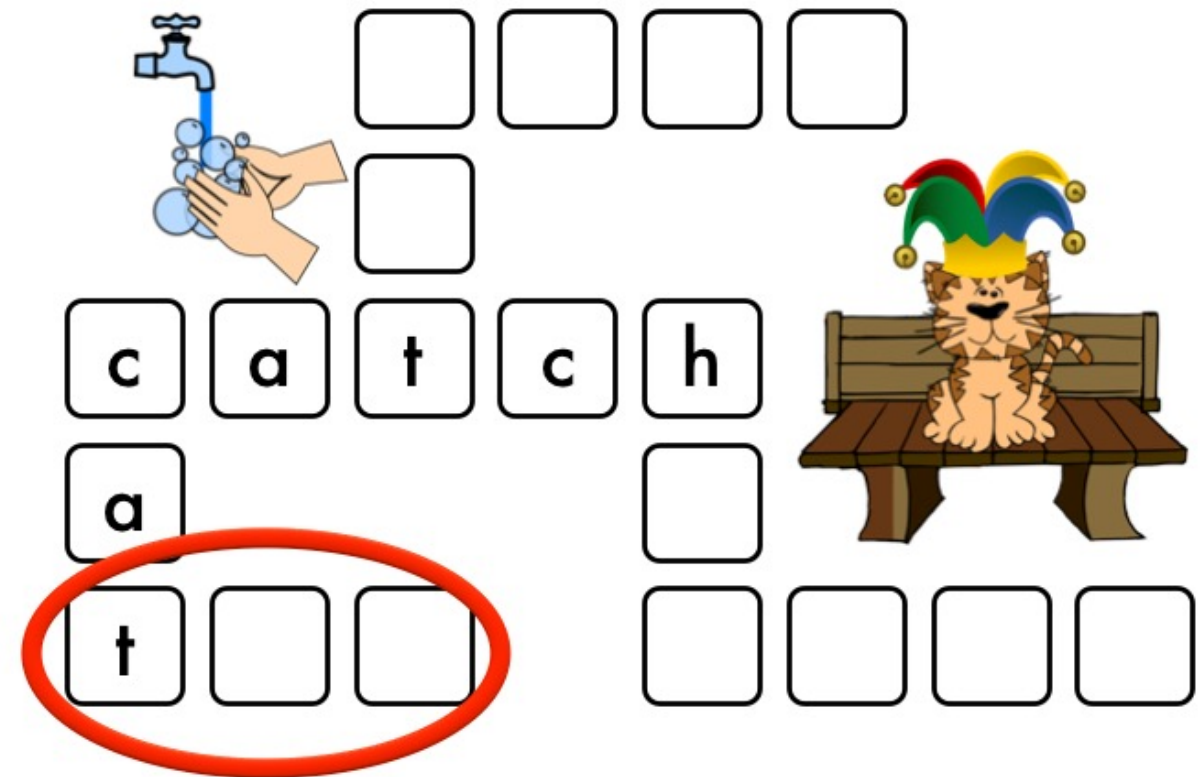


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- Only one three letter word starts with **t** - **tap**



3 letters

~~cat~~

hat

sat

tap

4 letters

snap

trap

5 letters

~~catch~~

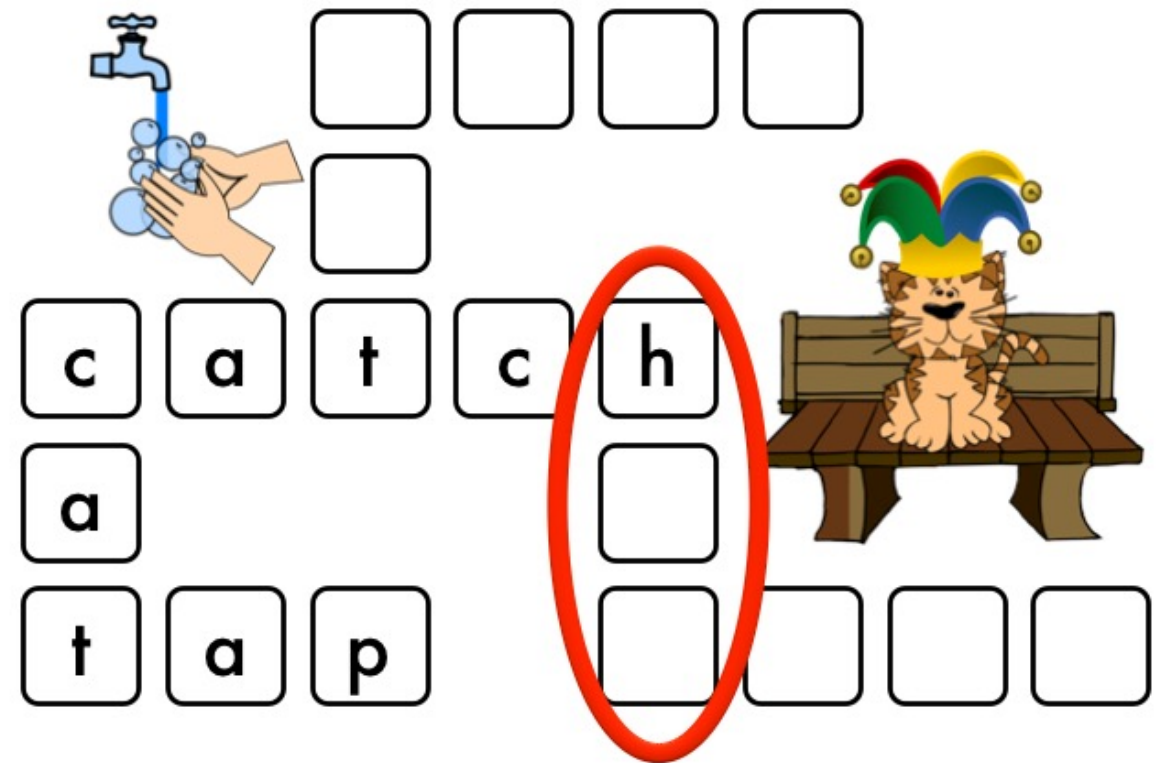


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- Fill in the word and cross it off
- Then find the next clue in the grid
- There is still that **h** we left



3 letters

~~cat~~

hat

sat

~~tap~~

4 letters

snap

trap

5 letters

~~catch~~

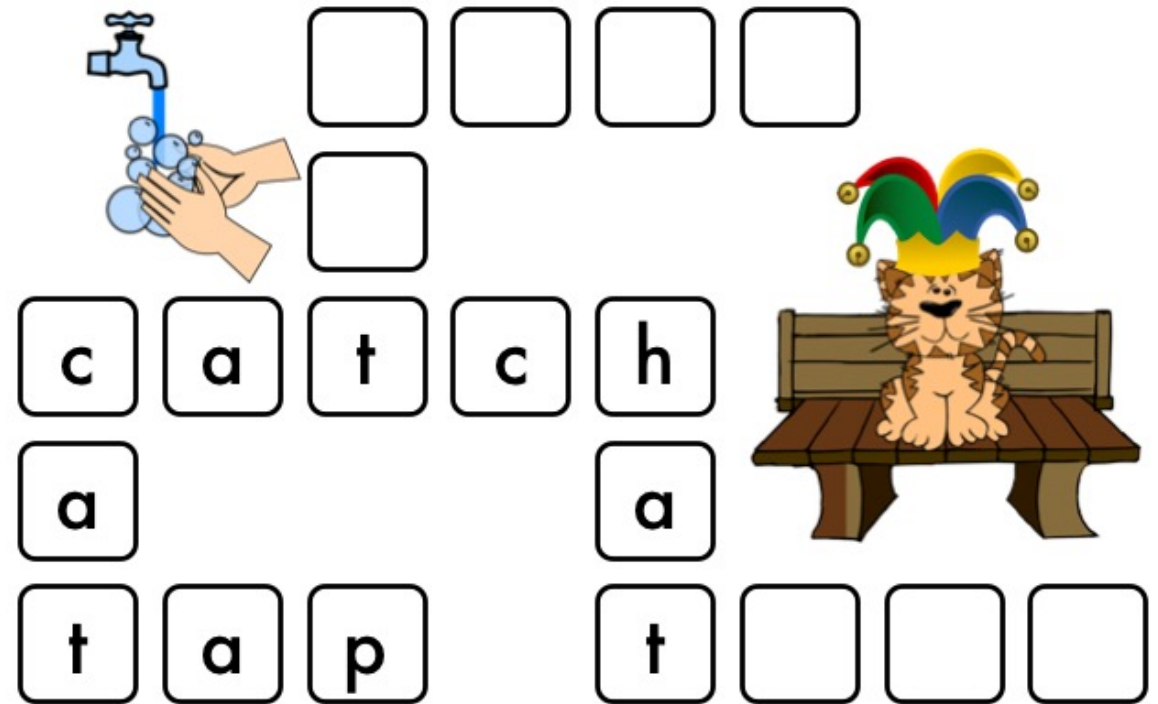


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- The only three letter word that starts with h is **hat**
- Fill in the word and cross it off



3 letters

~~cat~~

~~hat~~

sat

~~tap~~

4 letters

snap

trap

5 letters

~~catch~~

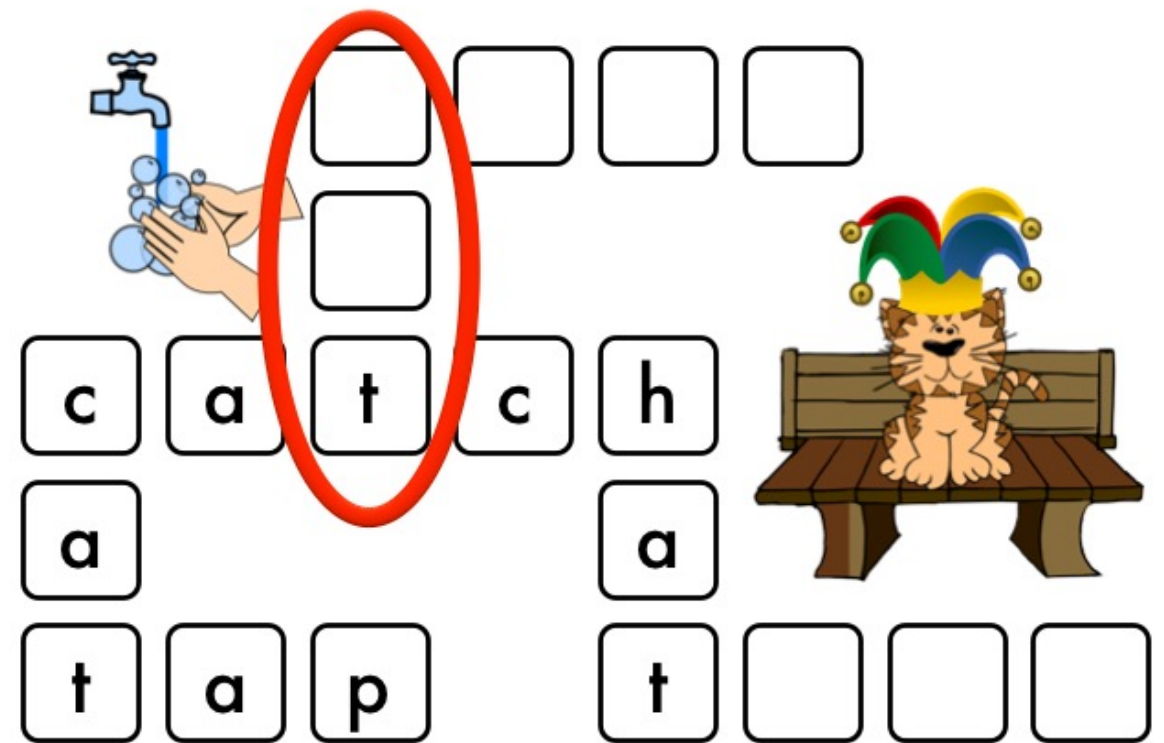


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- That pesky 3-letter word ending in **t** has been a problem.
- Before, lots of words could have gone there.
- But now only one 3-letter word is left.



3 letters

~~cat~~

~~hat~~

sat

~~tap~~

4 letters

snap

trap

5 letters

~~catch~~

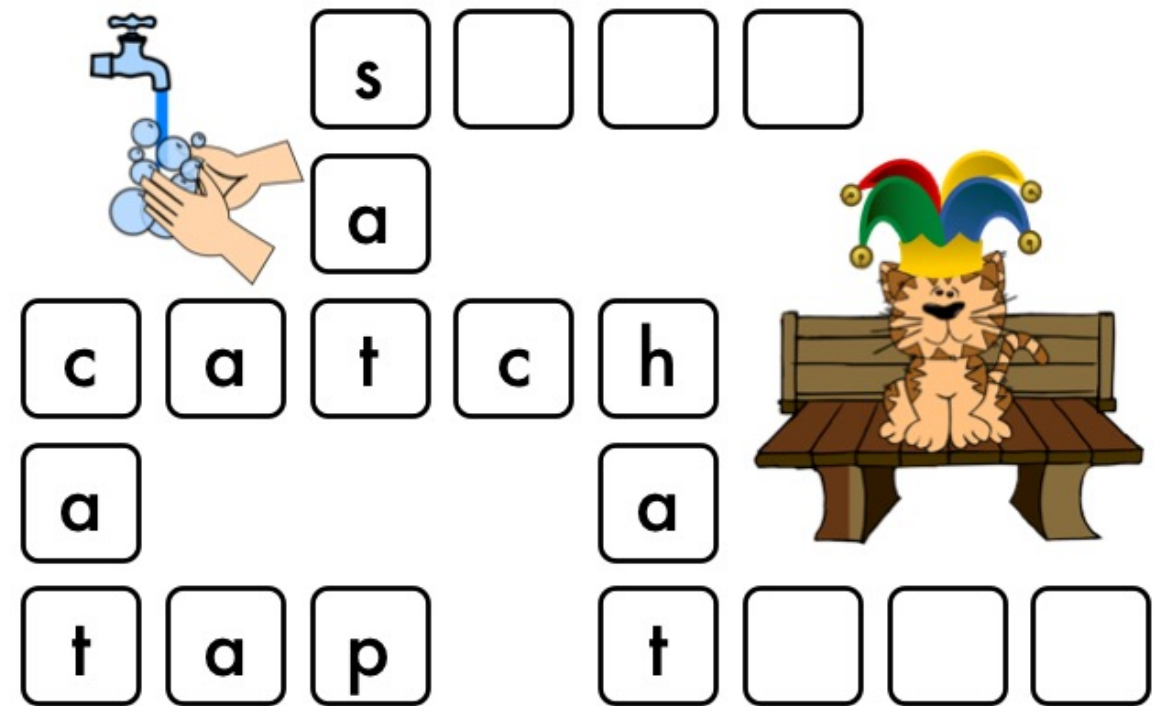


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- At last that clue's time has come!
- Fill in the word (**sat**) and cross it off



3 letters

~~cat~~

~~hat~~

~~sat~~

~~tap~~

4 letters

snap

trap

5 letters

~~catch~~

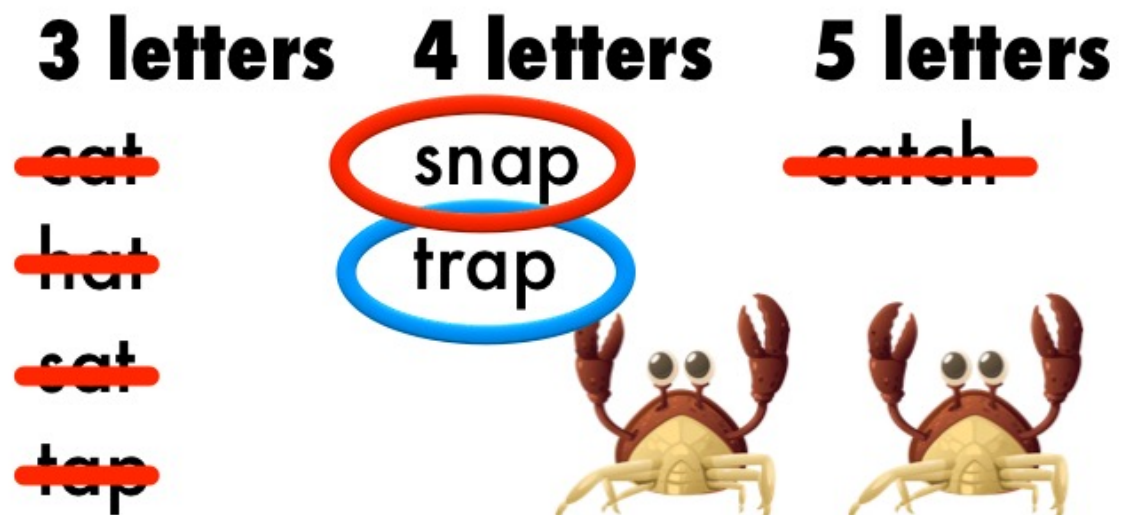
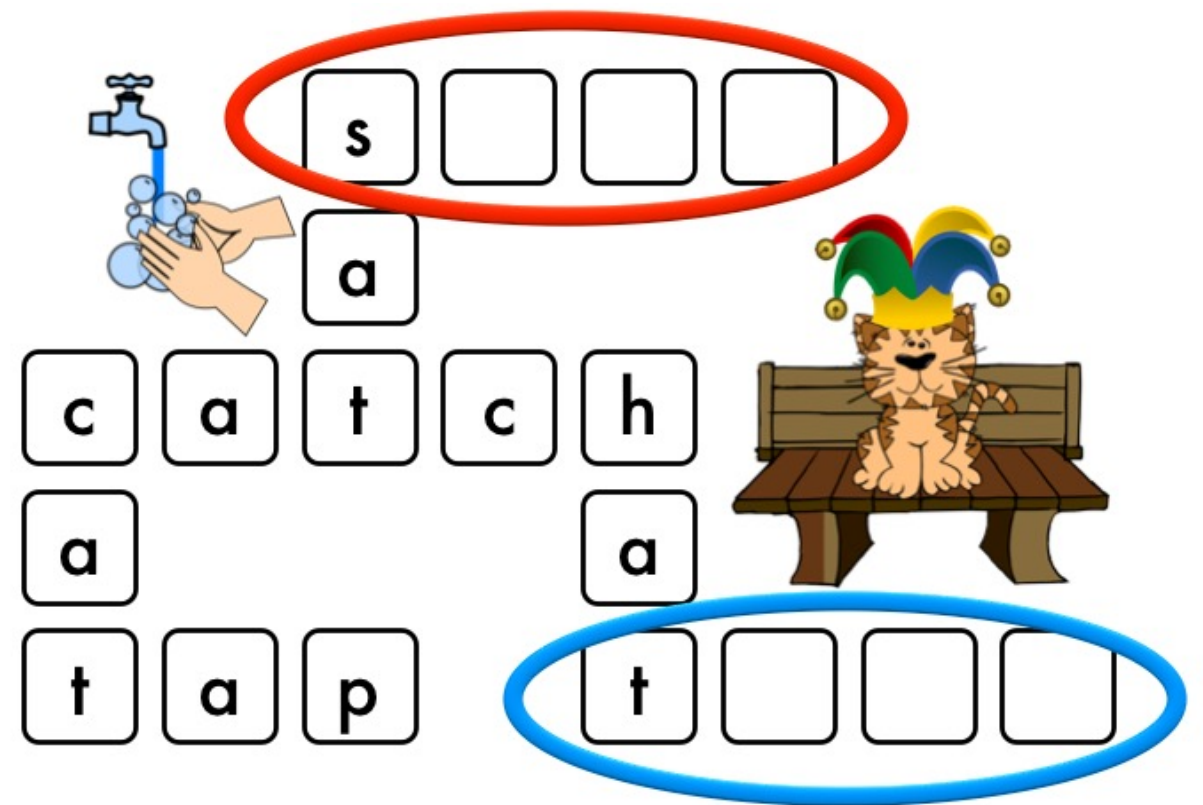


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- Now we only have 4-letter words left.
- We could do either first.

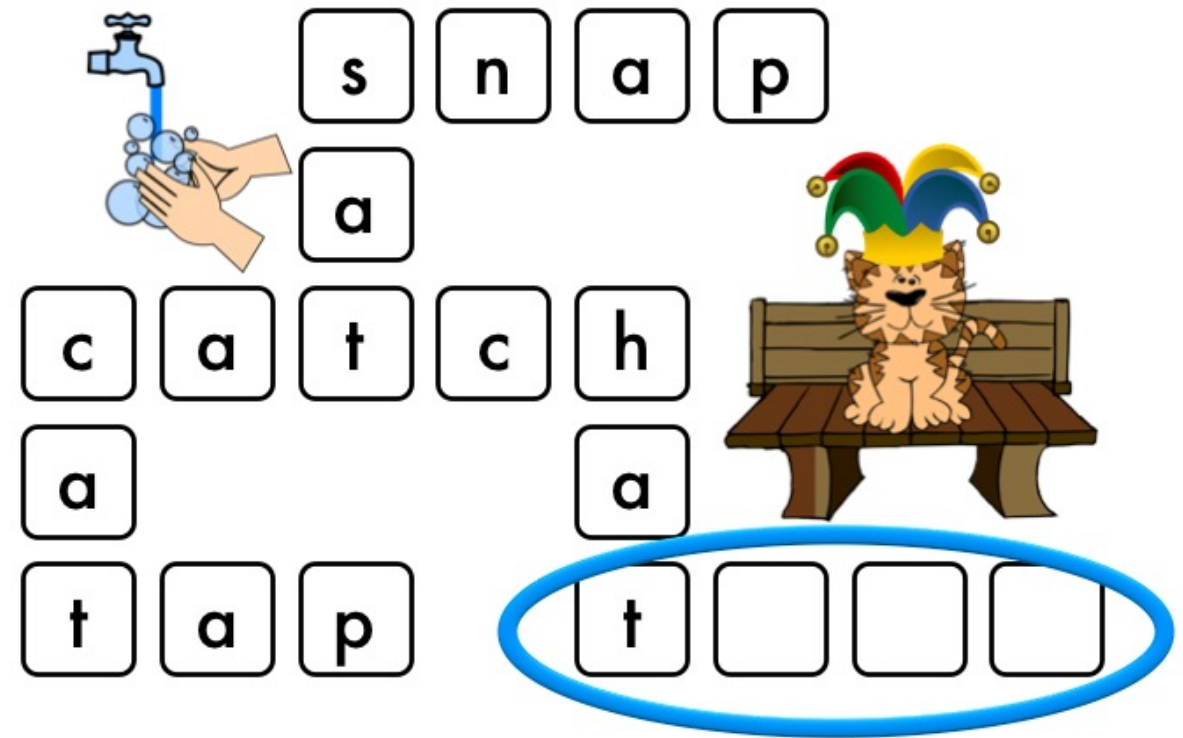


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- Let's do **snap** first



3 letters

~~cat~~
~~hat~~
~~sat~~
~~tap~~

4 letters

~~snap~~
trap

5 letters

~~catch~~

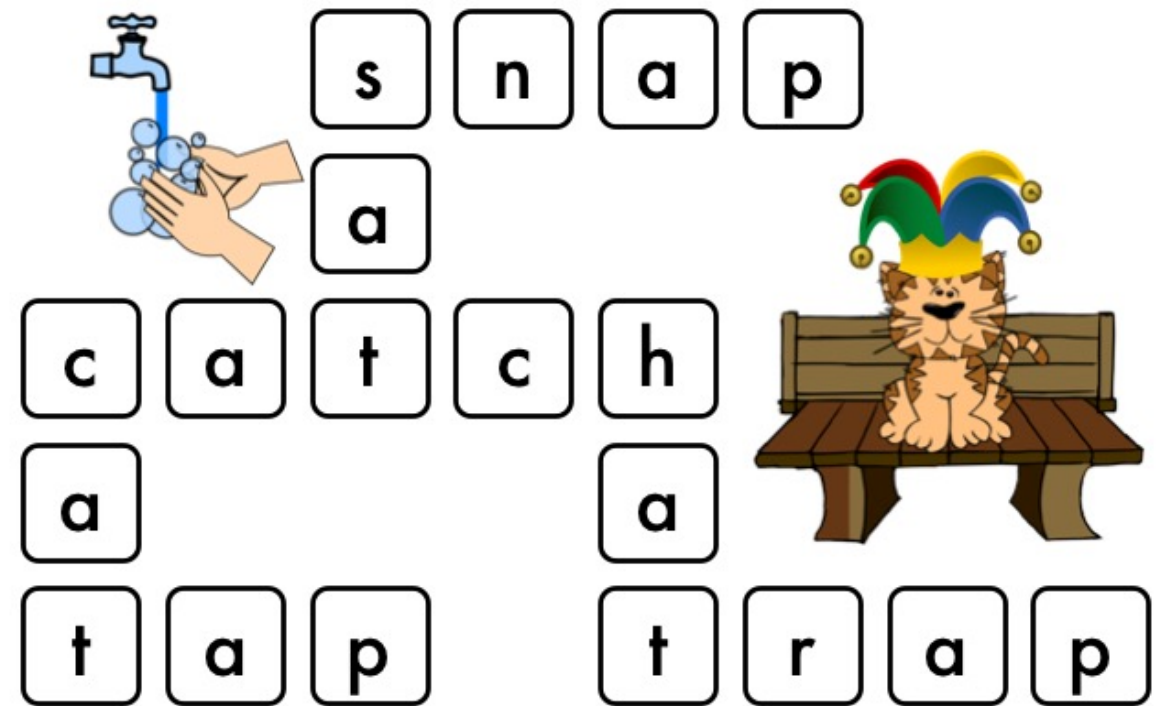


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- Finally we do **trap**
- And we are done!



3 letters

~~cat~~
~~hat~~
~~sat~~
~~tap~~

4 letters

~~snap~~
~~trap~~

5 letters

~~catch~~



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