Smart Cub Learning

11+ TOPIC PACK

Letter and Number Codes

Verbal Reasoning

60 questions from warm-up to exam level, with worked solutions

SAMPLE

Smart Cub Learning topic packs are original practice material. We are not affiliated with GL Assessment, CEM, Quest Assessments, Kent County Council or any school.

How to do it

A code changes a word into other letters or numbers by following a rule. Your job is to find the rule. Then you use it on a new word.

Learn the method

1. Look at the example. Find the first letter of the word and the first letter or number of its code.
2. Use the alphabet line at the top of the page. Count the steps from one to the other. Count the jumps, not the letters. Note forwards or backwards.
3. Test the rule on each of the other letters in the example. Every letter may move the same way. Or the moves may take turns: the 1st, 3rd and 5th letters one way, the 2nd and 4th another.
4. A number code may give a letter its place in the alphabet. So A = 1, B = 2 and C = 3. Or it may count back from Z, so Z = 1, Y = 2 and X = 3. A number may then be added or taken away. Every code number is from 1 to 26.
5. Use the rule on the new word, one letter at a time. To decode, undo the rule: go the opposite way. After Z, wrap round to A. Before A, wrap round to Z.
6. Check your answer. Take one letter of your answer and work backwards. You should get back to the letter you started with.

Worked example 1

If BED is written as CFE, how is FIN written?

A GJO **B** HKP **C** JMR

How to work it out

1. Compare the first letters: B becomes C. That is 1 place forward.
2. Check the other letters: each one moves 1 place forward.
3. Move each letter of FIN the same way: F to G, I to J, N to O.
4. So FIN is written as GJO.

The answer is A: GJO

Worked example 2

If the code for ARM is CTO, what word does DWP stand for?

A BUN **B** BIN **C** BUS

How to work it out

1. Go from the code back to the word: C becomes A. That is 2 places back.
2. Every letter of the code moves the same way.
3. Move each letter of DWP: D to B, W to U, P to N.
4. That spells BUN.

The answer is A: BUN

SAMPLE

Part 1 Warm up

15 questions. Circle the letter of your answer. Use spare paper for your working.

Each word has been written in a code. Work out the code from the example. Then use it to answer the question.

1 If OAK is written as RDN, how is TIN written?

A WLQ **B** XMR **C** YNS

2 If FAN is written as HCP, how is MUD written?

A PXG **B** RZI **C** OWF

3 If PAN is written as RCP, how is TIE written?

A XMI **B** VKG **C** RGC

4 If JET is written as LGV, how is FIG written?

A EHF **B** HKI **C** KNL

5 If EAR is written as GCT, how is FOX written?

A ENW **B** JSB **C** HQZ

6 If the code for MAP is PDS, what word does ELQ stand for?

A BIN **B** BAT **C** ANT

7 If the code for JUG is KVH, what word does UPZ stand for?

A TOY **B** TIE **C** WIG

8 If the code for PIN is SLQ, what word does FDW stand for?

A CAT **B** CAR **C** NET

9 If the code for JAR is LCT, what word does QYN stand for?

A OIL **B** RUG **C** OWL

Each letter stands for a number. Work out the rule from the example. Then choose the code for the new word.

10 If CUP is written as 3 21 16, how is TOE written?

A 22 17 7 **B** 21 16 6

C 7 12 22 **D** 20 15 5

11 If PIG is written as 16 9 7, how is RED written?

A 20 7 6 **B** 9 22 23

C 19 6 5 **D** 18 5 4

12 If KID is written as 11 9 4, how is GUM written?

A 20 6 14 **B** 7 21 13

C 9 23 15 **D** 6 20 12

13 If PUT is written as 16 21 20, how is RAN written?

A 19 2 15 **B** 20 3 16

C 18 1 14 **D** 9 26 13

Each word has been written in a code. Work out the code from the example. Then use it to answer the question.

14 If TOP is written as WPS, how is INK written?

A LQN **B** LON **C** MOO

15 If WELL is written as EHTO, how is RAFT written?

A UIIB **B** ZDNW **C** ZENX **D** ZINB

Score: _____ / 15

SAMPLE

29 If FLAG is written as OQJL, how is POND written?

A ZTXI **B** YXWM

C UXSM **D** YTWI

30 If TENT is written as YNSC, how is PLUM written?

A UUZV **B** VUAV **C** UQZR **D** TUYV

Score: _____ / 15

Part 3 Stretch

15 questions. Circle the letter of your answer. Use spare paper for your working.

Each word has been written in a code. Work out the code from the example. Then use it to answer the question.

31 If GIFT is written as KMJX, how is CLAY written?

A HQFD **B** IRGE

C FODB **D** GPEC

32 If ZEBRA is written as SXUKT, how is CHILD written?

A WBCFX **B** VABEW

C TYZCU **D** UZADV

33 If SALT is written as EMXF, how is CORN written?

A OADZ **B** LXAW

C QCFB **D** PBEA

34 If the code for FLAME is YETFX, what word does VKHPG stand for?

A HEART **B** DAISY

C CHEST **D** CROWN

35 If the code for DUCK is WNVD, what word does LPTG stand for?

A SOCK **B** FISH

C DOOR **D** SWAN

36 If the code for PEAR is JYUL, what word does MIWE stand for?

A NEST **B** SHOE

C OVEN **D** SOCK

Each letter stands for a number. Work out the rule from the example. Then choose the code for the new word.

37 If RING is written as 15 6 11 4, how is JUMP written?

A 10 21 13 16 **B** 13 24 16 19

C 7 18 10 13 **D** 6 17 9 12

38 If RISK is written as 17 8 18 10, how is THEN written?

A 18 6 3 12 **B** 19 7 4 13

C 6 18 21 12 **D** 20 8 5 14

39 If TERM is written as 19 4 17 12, how is BUSH written?

A 2 21 19 8 **B** 24 5 7 18

C 1 20 18 7 **D** 3 22 20 9

40 If SEND is written as 18 4 13 3, how is FOUR written?

A 5 14 20 17 **B** 4 13 19 16

C 7 16 22 19 **D** 6 15 21 18

41 If LIST is written as 10 7 17 18, how is KNOW written?

A 9 12 13 21 **B** 14 11 10 2

C 10 13 14 22 **D** 13 16 17 25

SAMPLE