Smart Cub Learning

11+ TOPIC PACK

Letter Sequences

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 letter sequence is a list of letters that follows a rule. Each letter or pair of letters moves along the alphabet in a set way. Your job is to find the rule and use it again.

Learn the method

1. Look at the alphabet line at the top of the page. Use it to count places from one letter to the next.
2. Find the move. Count the places from the first letter to the second. If you have pairs, work on the first letters alone, then the second letters alone. Do the same for a group of three letters.
3. Check the move on every gap or pair, not just the first. A swap means the two letters change places first, so AC becomes CA. Then they move.
4. Use the same move on the last letter, or the last pair. If you pass Z going forward, carry on from A. If you pass A going back, carry on from Z.
5. Check a backward move by counting forward from your answer. You should land on the letter you started from. Then find your answer in the options.

Worked example 1

QD goes to RE, KH goes to LI. What does OD go to?

A QE **B** PF **C** PE **D** EP

How to work it out

1. Look at QD and RE. Compare the first letters, then the second letters.
2. Q to R is 1 place forward. D to E is 1 place forward.
3. Check it on the other example pair. It works there too.
4. For OD: O moves to P and D moves to E, giving PE.

The answer is C: PE

Worked example 2

Find the letter or group of letters that comes next in each sequence. Use the alphabet at the top of the page.

A, I, Q, Y, (?)

A O **B** H **C** G **D** F

How to work it out

1. Use the alphabet at the top of the page. Count the places from each letter to the next.
2. The letters A, I, Q, Y move 8 places forward each time.
3. When you go past Z, carry on from A.
4. 8 places forward from Y is G.

The answer is C (the letter G).

SAMPLE

Part 1 Warm up: letter pairs and single-letter sequences

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

Work out the rule that changes each pair of letters. Use the same rule on the last pair.

1 CP goes to ER, IB goes to KD. What does BS go to?

A DV B DU C CT D EU

2 IS goes to KU, RW goes to TY. What does TW go to?

A UX B YV C VY D WY

3 QT goes to TW, HA goes to KD. What does WL go to?

A ZO B ZP C OZ D YN

4 DQ goes to GT, RN goes to UQ. What does OB go to?

A SE B RE C RF D QD

5 AC goes to DF, OG goes to RJ. What does WP go to?

A SZ B ZT C YR D ZS

6 GA goes to JD, ID goes to LG. What does BI go to?

A EL B LE C FL D DK

7 GJ goes to HK, ST goes to TU. What does VH go to?

A VH B XI C WI D WJ

8 ME goes to OG, UT goes to WV. What does NG go to?

A PI B OH C QI D IP

Find the letter or group of letters that comes next in each sequence. Use the alphabet at the top of the page.

9 T, A, H, O, (?)

A U B C C W D V

10 M, S, Y, E, (?)

A J B K C Q D L

11 S, O, K, G, (?)

A B B Y C D D C

12 T, X, B, F, (?)

A K B J C N D I

13 V, O, H, A, (?)

A T B U C M D S

14 W, S, O, K, (?)

A C B F C G D H

15 E, K, Q, W, (?)

A B B D C C D I

Score: _____ / 15

SAMPLE

Part 3 Stretch: letter pairs and sequences of pairs

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

Work out the rule that changes each pair of letters. Use the same rule on the last pair.

31 RI goes to XF, LF goes to RC. What does JG go to?

A GM B QD C PD D OC

32 GH goes to AM, PA goes to JF. What does WK go to?

A PO B QP C QQ D RP

33 GY goes to NS, IR goes to PL. What does IZ go to?

A PT B OS C QT D PU

34 OI goes to VC, BI goes to IC. What does EH go to?

A LC B KA C LB D MB

35 LI goes to EO, PI goes to IO. What does HP go to?

A BV B AW C IN D AV

36 AO goes to GK, GJ goes to MF. What does KQ go to?

A GW B PL C QM D QN

37 FP goes to AT, UN goes to PR. What does ZA go to?

A VE B UE C TD D UF

38 HE goes to NC, LX goes to RV. What does TS go to?

A YR B ZR C RY D ZQ

Find the letter or group of letters that comes next in each sequence. Use the alphabet at the top of the page.

39 QO, UR, YU, CX, (?)

A GA B FZ C HB D KD

40 PY, RZ, TA, VB, (?)

A WB B YD C ZD D XC

41 CS, DR, EQ, FP, (?)

A EO B GO C HO D HN

42 OB, QZ, SX, UV, (?)

A VT B WU C YR D WT

43 UF, WH, YJ, AL, (?)

A CN B DO C EP D BM

44 EO, HR, KU, NX, (?)

A TD B RB C PZ D QA

45 YL, XN, WP, VR, (?)

A UT B TV C WT D UU

Score: _____ / 15

SAMPLE