

The music puzzle pack · two

The first pack drilled naming and counting. This one asks you to think in chords, phrases and instruments — the things a composer actually decides. Nine puzzles, still no instrument needed.

WHAT IS INSIDE

GRADED FROM EASIEST TO HARDEST

PAGE	PUZZLE	WHAT IT DRILLS	LEVEL
1	How this pack works	Contents, and how the puzzles are graded	—
2	Build the triad	Spelling chords, and naming them back	Grade 1-2
3	Tones and semitones	How every scale is built	Grade 1-2
4	The missing barlines	Metre, and where the beats fall	Grade 1-2
5	Signs and ornaments	The marks above and below the notes	Grade 2
6	The clef conversion chain	One pitch, written two ways	Grade 2-3
7	Name the cadence	How a phrase arrives, or refuses to	Grade 2-3
8	Naming the form	What returns, and what is new	Grade 2-3
9	Who plays what	Instruments, families and a logic grid	Grade 2-4
10	The whole health check	Everything above, on one short melody	Grade 3-4
11-12	Answer key	For marking, once you have finished	—

BEFORE YOU START

PENCIL, NOT PEN

YOU WILL NEED PACK ONE

Not on the desk, but in your head. These puzzles assume you can already name notes in both clefs, count an interval and read a key signature.

SPELL IT OUT LOUD

Chords and scales are spelled in strict alphabetical order — every letter once, none skipped, none repeated. Saying the letters catches most mistakes before you write them.

THE LAST PAGE IS THE TEST

Puzzle nine asks nine questions about one eight-bar melody, each drawing on an earlier page. Leave it until the rest are marked.

A NOTE ON ACCIDENTALS

Throughout this pack a sharp is written **♯**, a flat **♭**, and a natural **♮**. Where a puzzle asks for a note that needs one, write the sign *before* the letter, as you would in a scale — **B♭**, not **Bb** or **B flat**.

Three notes, stacked in thirds

A triad is a root, the note a third above it, and the note a fifth above it — every other letter, never two in a row. What makes it major, minor or diminished is only the size of those two gaps.

PART A · SPELL THE TRIAD

ROOT, THIRD, FIFTH

1 C major				6 E minor			
2 G major				7 B $\flat$ major			
3 A minor				8 E $\flat$ major			
4 D minor				9 F $\sharp$ minor			
5 F major				10 B diminished			

PART B · NAME IT BACK

MAJOR, MINOR OR DIMINISHED?

The root is the lowest note in each of these. Write the full name — *D major*, not just *major*.

1 D · F $\sharp$ · A		4 G · B $\flat$ · D $\flat$	
2 C · E $\flat$ · G		5 F · A $\flat$ · C	
3 A · C $\sharp$ · E		6 E · G $\sharp$ · B	

PART C · THE ROOT HAS MOVED

HARDER

In each of these the three notes are still a triad, but the root is no longer at the bottom. Reshuffle them in your head until they stack in thirds, then name the chord *and* say which note is in the bass — root, third or fifth.

1 E · G · C		
2 G · C · E		
3 C · E · A		
4 A · D · F		
	chord	in the bass

Every scale is a pattern of gaps

A scale is not a list of notes to memorise. It is one fixed pattern of tones and semitones, started on whichever note you like — and the accidentals are simply whatever it takes to keep the pattern true.

PART A · WRITE THE PATTERN

SEVEN GAPS, EIGHT NOTES

Write T for a tone, S for a semitone, and 1½ for the tone-and-a-half that only one of these scales contains.

1 Major							
2 Natural minor							
3 Harmonic minor							
4 Melodic minor, going up							

PART B · SPELL IT OUT

LETTERS, IN ORDER, WITH SIGNS

Eight notes each, starting and finishing on the note named. Use every letter once on the way.

1 D major	
2 B♭ major	
3 E natural minor	
4 A harmonic minor	
5 G melodic minor, going up	

PART C · ONE NOTE IS WRONG

HARDER

Each scale below has exactly one note that breaks the pattern. Circle it, and write what it should have been.

1 F major	F · G · A · B · C · D · E · F	
2 A major	A · B · C♯ · D · E · F♯ · G · A	
3 E♭ major	E♭ · F · G · A · B♭ · C · D · E♭	
4 C harmonic minor	C · D · E♭ · F · G · A♭ · B♭ · C	

should have been

Put the bars back in

Each line below is a complete phrase with its barlines rubbed out. Add up the values from the left and draw a vertical line through the staff every time a bar is full. Every line ends exactly on a barline — no half-finished bars.

The quavers are printed with flags rather than beams on purpose: beaming them would show you the grouping, and the grouping is the puzzle.

LINE ONE THREE BARS OF 4/4

4/4



LINE TWO FOUR BARS OF 3/4

3/4



LINE THREE THREE BARS OF 6/8

6/8



PART B · COMPLETE THE BAR ONE VALUE EACH

Name the single note value that would fill each of these bars exactly. Write the word — *crotchet*, *dotted minim*, and so on.

- | | | | | | | | |
|---|-----|--------------------------------|-------|---|-----|-----------------------------|-------|
| 1 | 4/4 | minim + crotchet + ? | _____ | 5 | 4/4 | dotted minim + ? | _____ |
| 2 | 3/4 | dotted crotchet + quaver + ? | _____ | 6 | 3/8 | quaver + ? | _____ |
| 3 | 6/8 | dotted crotchet + crotchet + ? | _____ | 7 | 4/4 | minim + quaver + quaver + ? | _____ |
| 4 | 2/4 | quaver + quaver + ? | _____ | 8 | 9/8 | dotted crotchet × 2 + ? | _____ |

The marks around the notes

Pitch and rhythm tell a player which note and when. Everything else — how long, how hard, how joined, how decorated — is written in small signs above and below. Twelve of them are printed here.

PART A · MATCH SIGN TO MEANING

WRITE ONE LETTER IN EACH BOX

1 	2 	3 	4 
5 	6 	7 	8 
9 	10 	11 	12 

- | | |
|---|---|
| A Join the two notes into one longer sound. | G Crush a very quick extra note in before the main one. |
| B Play the note short, and lift off it. | H Strike this note harder than those around it. |
| C Shake quickly between the note and the one above. | I Pause on the note, holding it longer than written. |
| D Spread the chord, lowest note first. | J Play the notes smoothly, joined in one phrase. |
| E Hold the note for every bit of its value. | K Bounce once onto the note above and straight back. |
| F Take a breath, or lift the bow, here. | L Turn around the note: above, back, below, back. |

PART B · NOW WRITE THEM IN

FIVE MARKS ON ONE PHRASE

TREBLE



1 2 3 4 5 6

- | | |
|--------------------------------|---|
| 1 Slur notes 1 and 2 together. | 4 Mark note 5 tenuto. |
| 2 Make note 3 staccato. | 5 Put a fermata over note 6. |
| 3 Put an accent on note 4. | Mind which side of the stem each mark belongs on. |

One pitch, written two ways

A viola player reads the alto clef, where middle C sits on the middle line. The same sounding note therefore lands somewhere quite different from where a violinist would find it — and a composer has to be able to move between the two without thinking twice.

PART A · TREBLE INTO ALTO

NAME IT, THEN MOVE IT

Write each note's letter name in the box below it, then draw the same six pitches on the empty alto stave. One of them will need a short ledger line.

TREBLE

1 2 3 4 5 6

ALTO

PART B · ALTO INTO TREBLE

THE OTHER DIRECTION

ALTO

1 2 3 4 5 6

TREBLE

PART C · WITHOUT DRAWING ANYTHING

HARDER

1 A note sits on the middle line of the alto stave. Which line or space is it in the treble clef? _____

2 Moving a part from the alto clef into the treble clef, every note shifts by how many stave steps, and which way? _____

3 In the tenor clef, middle C sits on the fourth line up. Which note, then, is the bottom line? _____

4 Why is the viola given a clef of its own, rather than reading treble or bass like everyone else? _____

How music closes

A cadence is the two chords a phrase ends on. It is the moment of arrival, and the whole art of it lies in which kind you choose — whether the music has finished, merely paused, or been pulled somewhere you did not expect.

PART A · NAME THE CADENCE

PERFECT · IMPERFECT · PLAGAL · INTERRUPTED

NO.	IN THE KEY OF	FIRST CHORD	SECOND CHORD	CADENCE	NUMERALS
1	C major	G major	C major		
2	C major	F major	C major		
3	C major	C major	G major		
4	C major	G major	A minor		
5	F major	B $\flat$ major	F major		
6	D major	A major	B minor		
7	G major	G major	D major		
8	A minor	E major	A minor		

In the last one, the first chord has a sharpened third. Say why in a line:

PART B · THE OTHER WAY ROUND

NAME THE TWO CHORDS

Given the key and the cadence, write the two chords by name, with their numerals beside them.

- 1 D major · perfect _____
- 2 G major · plagal _____
- 3 F major · interrupted _____
- 4 B $\flat$ major · imperfect _____
- 5 E minor · perfect _____
- 6 A major · plagal _____

PART C · IN A LINE EACH

HARDER

- 1 Which cadence would you choose in the middle of a piece, to keep the music moving, and why?

- 2 Two of the four cadences both finish on the tonic chord. Name them, and say how they differ.

- 3 Why is the interrupted cadence given that name?

What returns, and what is new

A form is the pattern the phrases make across a whole movement — what comes back, what arrives new, and how often the ear is brought home. Naming one is mostly a matter of watching for returns.

PART A · LETTER THE SECTIONS

THEN NAME THE FORM

Each strip below is a whole movement. Write a letter in every block — the same letter whenever the music returns, a new letter for new material — then name the form.

bars 1–8 Opens in C major, ends on a G chord 	bars 9–16 New tune from G, works back to C major
---	---

FORM _____

bars 1–8 Main tune, C major 	bars 9–16 Quite different, A minor 	bars 17–24 Main tune again, C major
--	---	--

FORM _____

1–8 Main tune, D major 	9–16 New tune, A major 	17–24 Main tune, D major 	25–32 Another new tune, B minor 	33–40 Main tune, D major
---	---	---	--	---

FORM _____

1–16 Simple tune, F major 	17–32 Same tune, now in running quavers 	33–48 Same tune, in F minor 	49–64 Same tune, faster and louder
--	--	--	---

FORM _____

PART B · IN A LINE EACH

HARDER

1 A binary form whose first section carries a repeat sign is still binary, not ternary. Why?

2 In a rondo, what is the returning section called?

3 Name one thing a composer may change from variation to variation, and one thing that must stay.

Sorting the orchestra out

A composer chooses instruments before writing a single note — which family, how high, how many. These three puzzles work up from naming to reasoning.

PART A · FOUR FAMILIES

FOUR TO EACH COLUMN

piccolo · trombone · timpani · double bass · cor anglais · glockenspiel · french horn · harp · bassoon · snare drum · cello · cornet · bass clarinet · tuba · viola · tam-tam

WOODWIND

BRASS

STRINGS

PERCUSSION

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

PART B · LOWEST TO HIGHEST

NUMBER THEM 1 TO 4

SET ONE

SET TWO

flute · cello · viola · double bass

tuba · trumpet · trombone · french horn

PART C · THE LOGIC GRID

HARDER

Four players sit in a youth orchestra. Each plays one instrument and has been learning for a different number of years. Cross out what cannot be true; tick what must be.

	INSTRUMENT				YEARS LEARNING			
	oboe	viola	timpani	trumpet	two	three	five	seven
Aria								
Bede								
Corin								
Dilys								

THE CLUES

- 1 Bede is a percussionist.
- 2 Dilys plays a brass instrument.
- 3 Aria does not play a wind instrument.
- 4 Corin has been learning the longest of the four.
- 5 Bede has been learning for two years.
- 6 The string player has been learning longer than Dilys, but not as long as the woodwind player.

ARIA _____

BEDE _____

CORIN _____

DILYS _____

Eight bars, nine questions

Everything in this pack comes back at once. Study the melody, then answer below — each question leans on one of the earlier pages.



THE QUESTIONS

ONE LINE EACH

- 1 Name the key, and give two reasons from the music.

- 2 How many sharps does that key signature hold, and which note or notes?

- 3 Name the lowest and the highest note, and the interval between them.

- 4 Bar 1 spells out a triad. Name it, and name its three notes.

- 5 Two bars are note-for-note identical. Which two?

- 6 Bar 4 closes the first phrase on which degree of the scale — and what cadence does that imply?

- 7 Which two chords would you use to harmonise bars 7 and 8, and what is that cadence called?

- 8 Bars 1 and 5 are the same, but bars 2 and 6 are not. How does bar 6 differ, and what does that do to the tune?

- 9 Transpose bars 7 and 8 up a major second. Name the four notes, the new key, and its key signature.

The answers

Puzzles one to five. Mark in a different colour from the one you worked in, and where a reason was asked for, check the reason as well as the answer.

PUZZLE ONE · BUILD THE TRIAD

A 1 C E G · 2 G B D · 3 A C E · 4 D F A · 5 F A C · 6 E G B · 7 B $\flat$ D F · 8 E $\flat$ G B $\flat$ · 9 F $\sharp$ A C $\sharp$ · 10 B D F.

B 1 D major · 2 C minor · 3 A major · 4 G diminished · 5 F minor · 6 E major.

C 1 C major, third in the bass · 2 C major, fifth in the bass · 3 A minor, third in the bass · 4 D minor, fifth in the bass. A third in the bass is also called first inversion, a fifth in the bass second inversion.

PUZZLE TWO · TONES AND SEMITONES

A 1 T T S T T T S · 2 T S T T S T T · 3 T S T T S 1½ S · 4 T S T T T T S.

B 1 D E F $\sharp$ G A B C $\sharp$ D · 2 B $\flat$ C D E $\flat$ F G A B $\flat$ · 3 E F $\sharp$ G A B C D E · 4 A B C D E F G $\sharp$ A · 5 G A B $\flat$ C D E F $\sharp$ G.

C 1 B should be B $\flat$ · 2 G should be G $\sharp$ · 3 A should be A $\flat$ · 4 B $\flat$ should be B natural — the harmonic minor raises its seventh degree.

PUZZLE THREE · THE MISSING BARLINES

Line one, 4/4: barlines after the 4th and the 9th note. The bars are four crotchets · four quavers and a minim · one semibreve.

Line two, 3/4: barlines after the 1st, 4th and 6th note. Dotted minim · three crotchets · minim and crotchet · two quavers and two crotchets.

Line three, 6/8: barlines after the 6th and the 8th note. Six quavers · two dotted crotchets · crotchet, quaver, crotchet, quaver.

Part B 1 crotchet · 2 crotchet · 3 quaver · 4 crotchet · 5 crotchet · 6 crotchet · 7 crotchet · 8 dotted crotchet.

PUZZLE FOUR · SIGNS AND ORNAMENTS

1 B staccato · 2 H accent · 3 E tenuto · 4 J slur · 5 A tie · 6 I fermata · 7 C trill · 8 L turn · 9 K mordent · 10 G acciaccatura · 11 D arpeggio · 12 F breath mark.

Part B Each mark goes on the side of the note away from the stem, except the fermata, which always sits above the stave. Notes 1, 2, 3 and 5 have stems going up, so the staccato dot belongs under note 3 and the tenuto line under note 5; note 4 has its stem down, so the accent belongs above it. The slur over notes 1 and 2 curves below the noteheads, away from the stems.

PUZZLE FIVE · THE CLEF CONVERSION CHAIN

A E G C A F B. In the alto clef: E on the fourth line up · G on the top line · C on the middle line · A in the space above the top line · F in the top space · B on the first ledger line above the stave.

B D F C G E A. In the treble clef: D in the space below the bottom line · F in the first space up · C on a ledger line below the stave · G on the second line up · E on the bottom line · A in the second space up.

C 1 Middle C — one short ledger line below the treble stave. 2 Six stave steps, or three lines', lower. 3 D below middle C. 4 Because the viola's range straddles the join between the staves: in the treble clef most of its part would sit below the stave, in the bass clef most would sit above it, and either way it would be buried in ledger lines.

The answers, continued

Puzzles six to nine. The logic grid and the health check are worth arguing over — if your reasoning reached the same place by another route, it counts.

PUZZLE SIX · NAME THE CADENCE

1 Perfect, V-I · 2 Plagal, IV-I · 3 Imperfect, I-V · 4 Interrupted, V-vi · 5 Plagal, IV-I · 6 Interrupted, V-vi · 7 Imperfect, I-V · 8 Perfect, V-i.

The sharpened third: in a minor key the dominant chord is made major, so that its third becomes the leading note and pulls up to the tonic. Without it the cadence sounds slack.

B 1 A major to D major, V-I · 2 C major to G major, IV-I · 3 C major to D minor, V-vi · 4 B $\flat$ major to F major, I-V · 5 B major to E minor, V-i · 6 D major to A major, IV-I.

C 1 The imperfect — it ends on the dominant, which leaves the phrase unfinished and asks for an answer. 2 The perfect and the plagal; the perfect arrives from the dominant, the plagal from the subdominant, which is why the plagal sounds gentler and less final. 3 Because the ear is set up for a perfect cadence and the second chord arrives on the submediant instead, cutting the expected close off just as it lands.

PUZZLE SEVEN · NAME THE FORM

A 1 A B — binary. 2 A B A — ternary. 3 A B A C A — rondo. 4 A A¹ A² A³ — theme and variations.

B 1 Because a repeat plays the same section twice over; it does not add a third section, and nothing has departed and returned. 2 The refrain, or rondo theme. 3 Change: the rhythm, the key, the mode, the texture, the tempo, the accompaniment. Stay: the recognisable outline of the theme, and usually its phrase lengths, so the ear can still hear the tune underneath.

PUZZLE EIGHT · WHO PLAYS WHAT

A Woodwind: piccolo, cor anglais, bassoon, bass clarinet. Brass: trombone, french horn, cornet, tuba. Strings: double bass, harp, cello, viola. Percussion: timpani, glockenspiel, snare drum, tam-tam. The harp is often listed on its own, but on a seating plan it sits with the strings.

B Set one: double bass, cello, viola, flute. Set two: tuba, trombone, french horn, trumpet.

C Aria, viola, five years · Bede, timpani, two years · Corin, oboe, seven years · Dilys, trumpet, three years. Clue 1 gives Bede the timpani and clue 2 gives Dilys the trumpet; clue 3 then leaves Aria the viola and Corin the oboe. Clue 4 gives Corin seven years and clue 5 gives Bede two, so three and five are left — and by clue 6 the viola player has been learning longer than Dilys, so Aria takes five and Dilys three.

PUZZLE NINE · THE WHOLE HEALTH CHECK

1 G major: one sharp in the key signature, and the tune begins and ends on G. 2 One — F $\sharp$; it is why the last note of bar 7 needs no accidental of its own. 3 Lowest F $\sharp$ in bar 7, highest E in bars 3 and 6 — a minor seventh apart. 4 G major: G, B and D. 5 Bars 1 and 5. 6 The fifth degree, D — an imperfect cadence. 7 D major then G major, V-I: a perfect cadence. 8 Bar 2 falls to C and then B, while bar 6 climbs to E, the highest note of the whole tune, before dropping back to D — so the answering phrase reaches further up before it comes home. 9 D, B, G $\sharp$, A — A major, three sharps: F $\sharp$, C $\sharp$ and G $\sharp$.