

# Scales, Modes, and Chord/Cluster Concepts for 20th-Century Techniques Exam

## Traditional Modes

-The easiest way to remember these is to **know the modes in order of their alphabetical starting pitch: A, B, C, D, E, F, G**

-To build one of these modes on a different starting pitch, just follow its exact whole-step, half-step model

Mode	Structure	Whole-step/half-step Model
<b>Aeolian (A)</b>	A B C D E F G A	half steps are between 2-3 and 5-6, (just like "natural" minor)
<b>Locrian (B)</b>	B C D E F G A B	half steps are between 1-2 and 4-5
<b>Ionian (C)</b>	C D E F G A B C	half steps are between 3-4 and 7-8, (just like a "major" scale)
<b>Dorian (D)</b>	D E F G A B C D	half steps are between 2-3 and 6-7
<b>Phrygian (E)</b>	E F G A B C D E	half steps are between 1-2 and 5-6
<b>Lydian (F)</b>	F G A B C D E F	half steps are between 4-5 and 7-8
<b>Mixolydian (G)</b>	G A B C D E F G	half steps are between 3-4 and 6-7

## Modern Modes and Scales

- To build one of these modes on a different starting pitch, just follow its exact whole-step, half-step model

Mode/Scale	Structure	Whole-step/half-step Model
<b>Lydian Minor (F)-- used in jazz (compare to Lydian):</b>	F G A B C D <sup>b</sup> E <sup>b</sup> F F G A B C D E F	half steps are between 4-5 and 5-6
<b>Whole-Tone Scale</b>	C D E F <sup>#</sup> G <sup>#</sup> A <sup>#</sup> B <sup>#</sup> (=C)	All whole steps (only 7 notes in an octave)
<b>Octatonic Scale (in jazz, this is called a "Diminished" Scale)</b>	C D E <sup>b</sup> F G <sup>b</sup> A <sup>b</sup> B C C D <sup>b</sup> E <sup>b</sup> F <sup>#</sup> G A B <sup>b</sup> C (in jazz, these are the two options for a "diminished scale"; in classical music there are 42 other possibilities)	The most common ones <b>alternate whole-step/half-step or half-step/whole-step</b> to create 9 notes in an octave
<b>Gapped Scale</b>	C D E G A this example is a " <b>pentatonic scale</b> " made by using only 1, 2, 3, 5 and 6 of a major scale	Selected pitches derived from a larger scale (omit certain notes from a larger scale)

## Terms for Chords, "Sonorities", "Simultaneities", or Clusters

Term	An Example	Concept
<b>Secundal</b>	A B C D E F <sup>#</sup> pitch cluster	a cluster of just 2nds
<b>Tertian</b>	G B <sup>b</sup> D F A can also be described in triadic chord terms as a " <b>minor ninth" chord: Gmi9</b>	a cluster of just 3rds
<b>Quartal</b>	E A D G	a cluster of just 4ths
<b>Quintal</b>	C <sup>#</sup> G <sup>#</sup> D <sup>#</sup> A <sup>#</sup>	a cluster of just 5ths
<b>Whole-tone Chord</b>	E F <sup>#</sup> G <sup>#</sup> A <sup>#</sup> B <sup>#</sup>	a cluster of pitches related by whole-steps
<b>Bichord</b>	G B <sup>b</sup> D F A C the pitches above can be seen as a " <b>tertian bichord</b> " ("G minor chord" plus an "F major chord" stacked together)	Two chords on top of each other (a combination of two distinct chordal sonorities)
<b>Mixed Interval chord</b>		Not built from one consistent interval—useful in atonal music
<b>Mystic Chord</b>	C F <sup>#</sup> B <sup>b</sup> E A D	A "quartal" hexachord (has 6 notes built in combinations of Perfect 4ths, diminished 4, Augmented 4ths)--developed by the Scriabin
<b>Pandiatonicism</b>	Stravinsky and Copland's "neo-Classic" styles	Free use of diatonic scale resources (freely make chords from the notes of the diatonic scale without worrying about resolving them functionally in a traditional sense)
<b>Tone Cluster (harmony)</b>	Use a 12-inch block of wood to press down black and white keys on a piano	A dense block of PITCHES
<b>Sound Mass (texture)</b>		A dense block-like musical TEXTURE (focuses more on texture, color, dynamics than on pitch)
<b>Heterophony</b>	A melody and its variation played together	Simultaneous variation in different layers/textures
<b>Montage</b>		Diverse musical elements assembled into a composite
<b>Multiphonic</b>	A clarinetist plays a note while humming a different note through the instrument	Simultaneous multiple sounds/partials

## Modern Terms for Rhythm

<b>Additive Rhythm</b>	A larger meter (such as 5/8) constructed by combining smaller irregular units (2 + 3 or 3 + 2)
<b>Metric Modulation</b>	Transition from one meter or tempo to another through constant common-note values (Carter, etc.)
<b>Non-retrogradable rhythm</b>	A rhythm that is the same forward and backward (doesn't change when done in retrograde/backwards)
<b>Polyrhythm</b>	More than one meter performed simultaneously
<b>Serialized rhythm</b>	A rhythm that is controlled by numbers in the manner of a 12-tone-row (Webern, etc.)
<b>Added Values</b>	When a note/rest/dot (often 16th-note value) is added to disrupt an otherwise "square" rhythm
<b>Syncopation</b>	Off-the-beat accents