

Music Theory Exercises

1 Piano Keyboard

Use the following picture for reference in answering questions 1 and 2.



Figure 1: No homo.

1. (a) Name the red key. (b) Name the yellow key. (c) Name the orange key. (d) Name the dark blue key.
2. (a) What color is D? (b) What color is G? (c) What color is F? (d) What color is B?

Use the following picture for reference in answering questions 3 and 4.

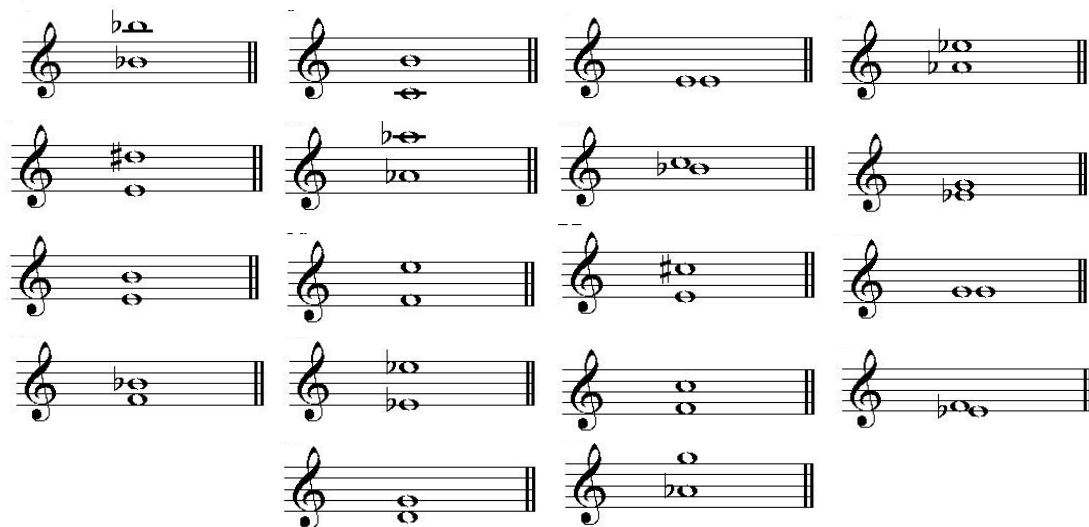


3. (a) Name the green key. (b) Name the purple key. (c) Name the orange key. (d) Name the yellow key.
4. (a) What color is B \flat ? (b) What color is F \sharp ? (c) What color is D \flat ? (d) What color is A \sharp ?
5. Go to your piano keyboard, close your eyes, and play a random note. Open your eyes and identify it. Repeat. Make sure you play both white and black notes.

2 Major Scales

- Write down the pattern of steps for a major scale (**Whole** / **Half**). There should be seven steps in all.
- (a) How many **Whole** steps are there? (b) How many **Half** steps are there?
- In the C major scale (formed by the white keys on the piano) where are the **Half** steps? Identify the pairs of notes they fall between.
- Identify all the major scales below. (This was Sabrina's idea :P.)

- In the key of C major, ...
 - what is the 3rd scale degree?¹
 - what is the 4th scale degree?
 - what is the 6th scale degree?
 - (*bonus*) what is the 9th scale degree?
- In the key of D major, ...
 - what is the 1st scale degree?
 - what is the 5th scale degree?
 - what is the 3rd scale degree?
 - what is the 7th scale degree?
- In the key of F major, what is the 4th scale degree?
- Write down all the scale degree names you can remember. Then look at the list of scale degree names in Section 4. Learn them, and write them again without looking.
- In the key of G major, ... (a) what is the tonic? (b) what is the subdominant? (c) what is the mediant? (d) what is the leading tone?
- In the key of B \flat major, ... (a) what is the dominant? (b) what is the submediant? (c) what is the supertonic? (d) what is the tonic?
- In the key of C major, ... (a) name the scale degree of B. (b) name the scale degree of F. (c) name the scale degree of E.
- In the key of E major, name the scale degrees of all the black keys. (How many are there?)



3 Intervals

Use the intervals above for reference in answering questions 1 through 3.

1. How many of the intervals are Major?
2. How many of the intervals are Perfect?
3. How many of the intervals are...
 - (a) Perfect 5ths? (b) Major 7ths? (c) Major 3rds? (d) Perfect 4ths? (e) Major 6ths?
4. What's the difference between a Major 2nd and a Perfect 2nd? (Trick Question.)
5. In a major scale, what's the interval between the following scale degrees:

(a) the 1st and 2nd?	(e) the 1st and 6th?
(b) the 1st and 3rd?	(f) the 1st and 7th?
(c) the 1st and 4th?	(g) the 1st and 8th?
(d) the 1st and 5th?	(h) the 2nd and 7th?
6. In a major scale, what's the interval between the following scale degrees:

(a) mediant and leading tone?	(d) mediant and submediant?
(b) subdominant and dominant?	(e) subdominant and submediant?
(c) dominant and leading tone?	(f) subdominant and tonic?
7. (Bonus) How many ways are there to make a Major 3rd... (a) between two black keys? (b) between two white keys? (c) between a white key and a black key? (d) between a black key and a white key?

¹See 4 **Helpful Information about Scale Degrees**

4 Helpful Information about Scale Degrees

Tip for Remembering Scale Degree Numbers.

Count “1, 2, 3, ...” *starting from the root* and pointing at the notes as you go. So for the C major scale, you would go

“1, ...” (point at C)
“2, ...” (point at D)
“3, ...” (point at E)
“4, ...” (point at F)
“5, ...” (point at G)
“6, ...” (point at A)
“7, ...” (point at B)
“8.” (point at C).

Tips for Remembering Scale Degree Names.

Here is the list of scale degree names:

1st	Tonic
2nd	Supertonic
3rd	Mediant
4th	Subdominant
5th	Dominant
6th	Submediant
7th	Leading Tone
(8th	Tonic)

Notice:

- The supertonic is just above the tonic.
- The leading tone is just below the tonic.
- The mediant is a 3rd above the tonic, and
The submediant is a 3rd below the tonic.
- The dominant is a 5th above the tonic, and
The subdominant is a 5th below the tonic.²

²You can also remember “the subdominant is just below the dominant”, but this is not the reason for its name. It is analogous to the relationship between the mediant and the submediant.