

First picture is note lengths, but before that I want to talk about everything else. You can ignore the dots with sticks for now. The first most noticeable thing is of course the title. On the right side underneath that is the composer/transcriber/arranger/whateveryouwanttocallyourself. To the left of that is the tempo. Tempo is what is used to dictate how fast a piece plays: a dot on a stick, an equal sign, and a number (120). This means this piece is to be played at 120 quarter (more on this later) notes per minute. The text never to that, "Allegro" is just another way to say "fast". There are many of these and you really don't have to know all of them. If you have a piece with an unusual word for tempo, google it. Chances are you'll get a range of numbers for it. Pick whichever one you like. Sometimes you may come across words that say how the piece should be played. (Cheerfully, expressively, etc. Ignore this, you can't do that on starbound) After that is the piece itself.

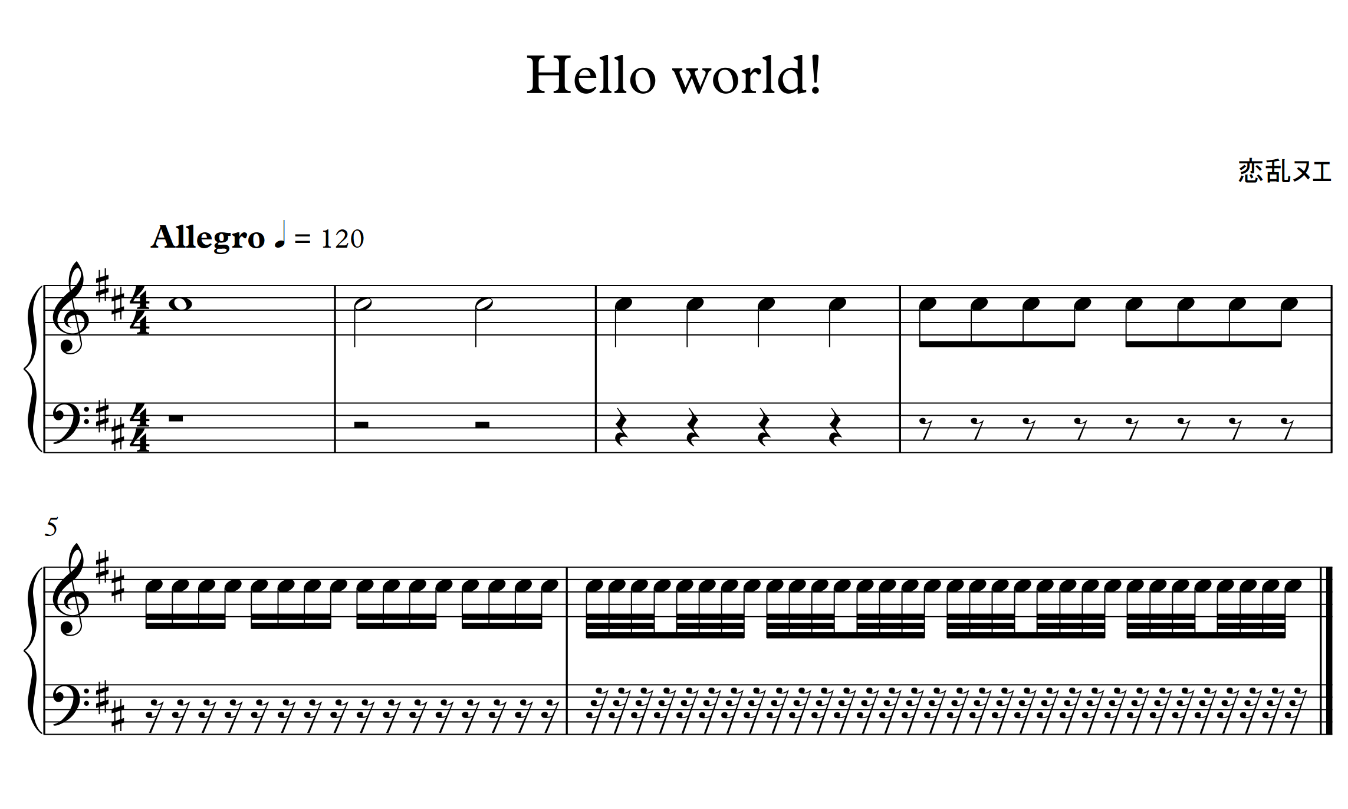
This particular example is for piano so it uses a grand staff. This is just a fancy name for saying there are two sets of 5 horizontal lines conjoined by a curly bracket. (A staff is simply five horizontal lines and four spaces used to represent different pitch.) On each staff you'll notice two swirly symbols. These are called clefs. They are reference points for the pitch of notes. We need this otherwise we won't know what pitch each note is at on the staff. For this example, we have what is known as the treble clef on the top and the bass clef on the bottom. There is another clef known as the alto clef but I couldn't get a picture of it. They are also known as the G, F, and C clefs respectively. The treble clef says the second line from the bottom of the staff is the note "G". The bass clef says the line that passes through the main swirl is the note "G". (The second line from the bottom in this case) The alto clef says line that is between the two dots is the note "F". (The second line from the top) The alto clef says the line that passes through the middle of the clef is the note "Middle C". More on note names later.

After that, You'll notice two sharp(#) signs on each staff.(Sometimes it may be flat(b) instead of sharp(#)) This is the key signature. This primarily tells us what key a piece is in. A piece's key determines the accidentals later in the piece. (More on accidentals later) Keys come in major and minor primarily.

To tell what major key it is, find the right most sharp(#) and count up one line. In this case, the key is D major because one line above the space that the right most sharp(#) is the second line from the top of the staff and that is defined by the clef as the note of "D". More on this later. If you see flat(b) instead of sharp(#), you have to count four spaces or lines above where the left most flat(b) lies. If this made no sense to you... um... count the number of sharps(#) and flats(b) and ask google what key it is.

For the purposes of starbound and the briefness of this guide, do not concern yourself with minor keys. Nothing about the key signature will tell you if it is major or minor and this requires a lot more work to explain. Do not be fooled by people saying sad songs are always minor either. It just happens to be a trend.

You'll notice it is split into six rectangles. These are called measures. A measure's length is defined by the numbers after the key signature called the time signature. In this case, a 4 on top of a 4. This can be referred to as 4/4. This means there are four quarter notes in the measure. If it said 6/8(6 on top of 8), it would be six eighth notes in a measure. The top number can be anything positive but it tends to be 2, 3, 4, or 6 unless the song is unusual. The bottom number is always a power of 2. (2, 4, 8, 16, etc) This does not affect the number of measures there, just the length.



Finally I can talk about note lengths... Here is the same picture if you cannot scroll up for whatever reason. Alright, the first note (a single oval) is a whole note. Traditionally this means the entire measure is used up to play the whole note. However for the sake of not confusing people, it is the length of four quarter notes. Next is half notes, you'll notice there are two of them. They have the value of two quarter notes each. Notice how they add up to 4 quarter notes. Next is quarter notes. There are four quarter notes in a measure because that is what we defined earlier with the time signature. After that, eighth notes, sixteenth notes, and thirty-second notes. Underneath them in the bass clef, you'll notice there are funny symbols for each corresponding note. Those are called rests. They share the length value of the notes but they are as their name suggests, rest. They have no corresponding pitch like the notes.(With the grand staff, or any staff with more than one staff, everything plays in sync. In this case, the note and the rest are played at the same time. However this just means you play the note and the rest is a placeholder so your sheet maker won't bitch at you.)

Another something I forgot to include in the picture. Dotted notes. If you add a dot to the right of the note, it will have 50% more length. I.e. a half note is worth two quarter notes but a dotted half note is worth three quarter notes. Do not confuse this with a staccato which is a dot under or above the note. More on this later.



The next topic is note pitch and names. I said middle C before, but what does that mean? What pitch is that? I do not want to go into the mathematics of note pitch as ugly logarithm are involved. Middle C is basically a quick reference point. In the treble clef, it is located on the line right outside the staff. (These are called ledger lines, you add them if you are going outside of the staff) You can see in the picture that this is the first note of the first measure in the treble clef. I conveniently put it there. In the bass clef, middle C is the note one line above the staff. This is the last note in last measure of the bass clef. You can use that as a reference point for how the two staffs relate to each other. After is the note D. You'll notice that it doesn't lie on on a line but rather, between two lines, on a space. The space between the C and D is known as a whole step. Next is E which is another whole step. This time it lies on the first line from the bottom of the staff. Next is F. However, the gap between the E and F is a half step. More on this later. You can look at a piano keyboard if you want. Next is G, A, B, and finally C again. All of these are whole step intervals except for the interval between B and C. This is again a half step. You repeat the pattern of C, D, E, F, G, A, and B until you get to the next C. This one is located on the second line outside of the staff. A quick note, C to C is called an octave. That is the name of the interval between them. However, they do not sound the same. The frequency is twice as much as the previous. This of course means it is higher pitched...(Just a note so if I start saying this stuff and it sounds like nonsense: The rest of the intervals are unison, second, third, fourth, fifth, sixth, seventh, and finally octave. This ends the simple intervals. You can go further by saying ninth but you can also just say compound second and so on.)

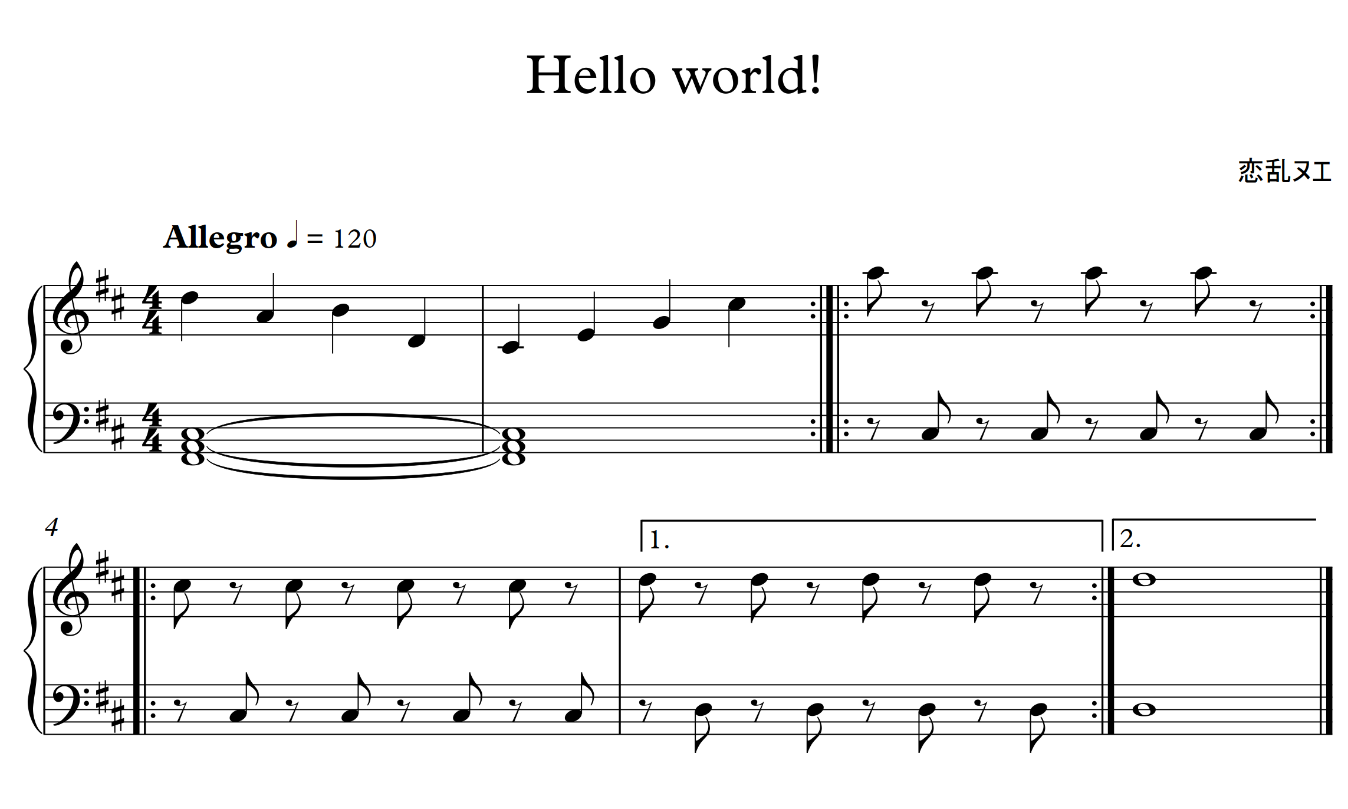
In the bass clef, it is similar but not the same. The first note in the picture in the bass clef is C but two octaves below middle C. The last note is of course middle C. (I say last, but you can go much farther out in both directions. Being able to identify the note names of notes two octaves below and above middle C is plenty)



We know about reading notes, but there is more than the 7 letter names. Accidentals are modifications to a note to give more intervals. A sharp(#) next to a note means it is to be played one half step above. A D with a sharp(#) is called a D sharp. Not a sharp D as the order in the sheet music implies. The next note in the picture is a D natural. It means you just play normal D again. After that, D flat(b). Instead of going up a half step, you go down a half step. Next measure has a D double sharp(X). This means two half steps or a whole step above the note. Next is D natural and then D double flat(bb). Same idea. The last two are weird ones that you shouldn't worry about. Those are quarter intervals that you can't normally play on piano without messing with it a bit... Important! The changes last until the end of the measure. (the | lines are where the measure ends, more on this later.)

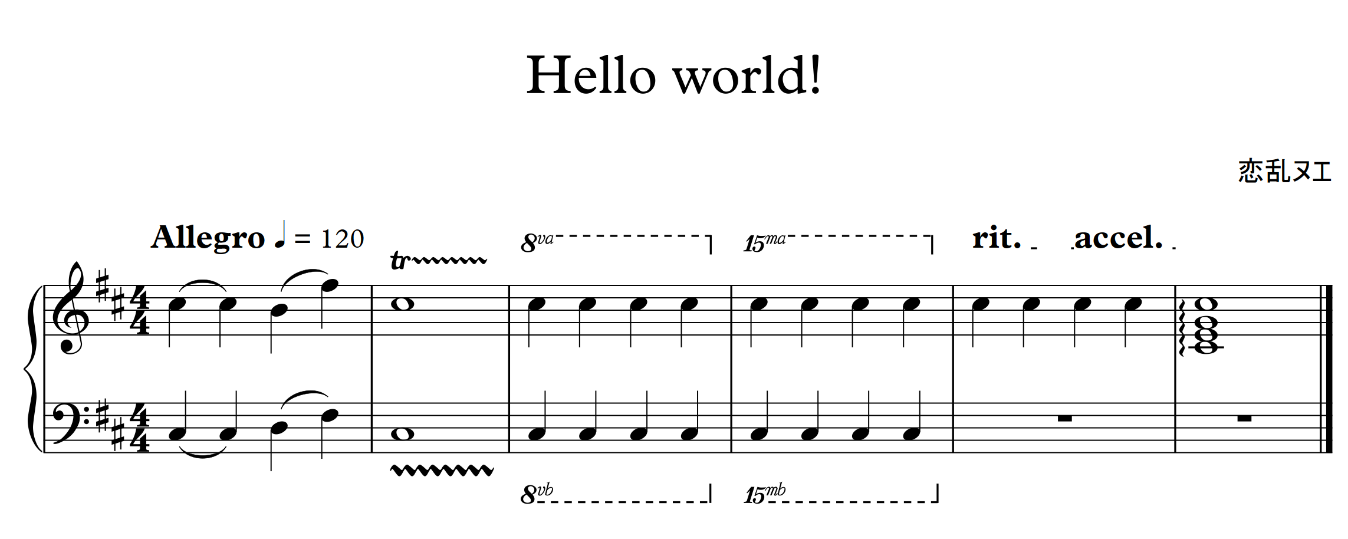


Tuplets. Not much to see, lots to explain. Basically a simple tuplet is when you group three notes of equal length together and they only take up the length of two notes. In this case, three eigth notes taking up the space of 2 eigth notes. The 5 is a little strange and less common. It is called a quintolet. It fits 5 notes in the space of 4. There are other variations with different numbers but triplets is the most common.



Now that you can read the notes and what not, let’s not worry about that anymore. As mentioned earlier, the measures are ended by | lines. These are called standard bar lines. That is great and all but what if there are two ||? That is called a double bar line and is used to separate two sections of a piece. However, a normal | and a thick | together means the piece has ended. What if the composer wanted a section to be repeated again? Instead of a normal bar line, he or she would use repeats. These look like this: “||:”, ":||", or ":|||:". Begin repeat, end repeat, and repeat and end repeat as depicted in the image above. They usually come in pairs, begin repeat and end repeat, but what if there is no corresponding begin repeat for the end repeat? Then you would start the piece over. When you reach the end repeat again, you skip it. If there is a corresponding begin repeat for the end repeat, you start over from the begin repeat. You'll notice the "1." and "2." in the fifth and sixth measure. This means when you hit the end repeat and go back, you won't play the measures labeled with "1." again, instead you go to "2.". There are more complex things you do with repeats but this is as extensive as I get.

There are also something known as a coda in music which looks like a set of crosshairs, this indicates the performer must jump to another section of the music. This is more complex and beyond the scope of this guide. Please look it up yourself.



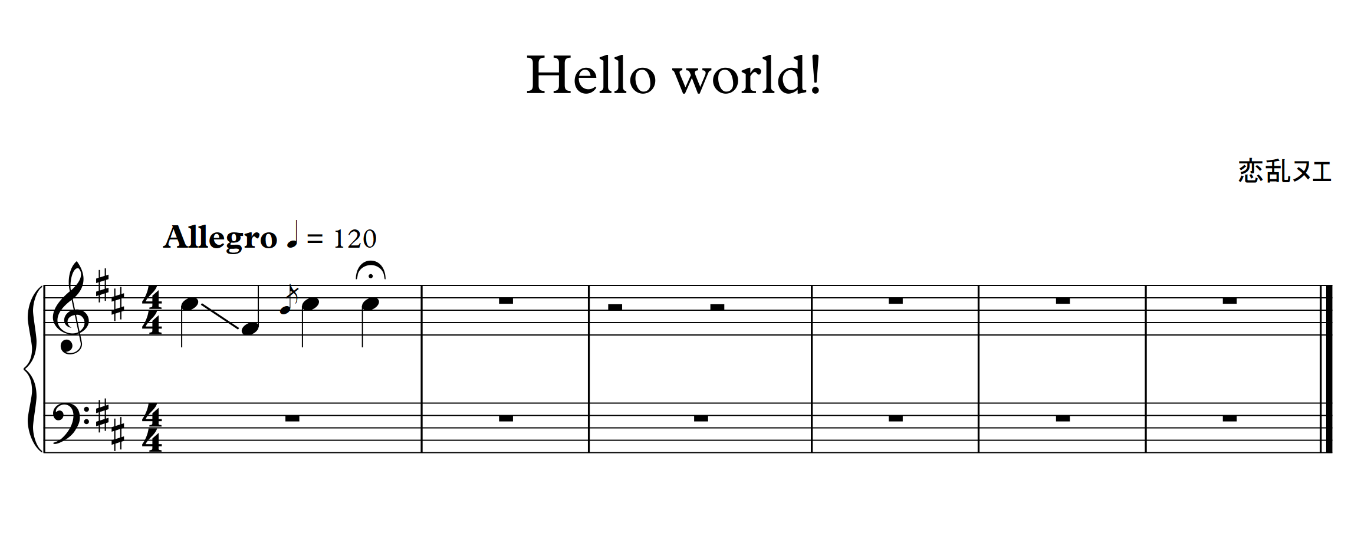
That covers most of the important stuff, now for some trickier little bits that are useful to know. The first measure depicts a tie and a slur. The tie means you do not play the second note but the first note inherits the second note's length. A slur means the two notes are not to be played separately. You must play the second note as soon as the first note ends. No pause.

The next measure depicts a trill and a vibrato. A trill is when you play the note and a note one step away from it very quickly and constantly. A vibrato is similar but rather than alternating between two distinct pitches, you slide between them quickly. You cannot do a vibrato on a normal piano but I put it on the staff as an example.

After that is 8va and 8vb. This means you play the section it covers an octave above and below respectively. 15ma and 15mb is the same concept but for two octaves.

Rit. stands for Ritardando and accel. stands for Accelerando. These indicate slowing down and speeding up. However, unless it has a target tempo indicated, resume the previous tempo.

The last measure has what is known as an arpeggio. Specifically, an arpeggiated chord. This means each note in the chord is intended to be played individually. Usually quite quickly. Usually ascending. However if there is an arrow pointing down on the squiggly line, play them descending.



The last image is a slide, grace note, and fermata in that order.

A slide (or glissando) is as the name implies, you play ever note between them. On a piano keyboard this is done by hitting every black or white key between the two designated notes. It is possible to play both black and white keys.

A grace note is a note quickly played before the beat. If there is no small line through the grace note, start the grace note on the beat. Occasionally there is no defined starting note and you simply slide to it quickly.

A fermata is a pause. You can think of it as a sudden tempo change temporarily. This is different from a rit. in the sense it is sudden rather than gradual. The exact length of the pause is up to the performer. There are more symbols but for the most part, this is the most common.

There is a LOT more but these are just the basics. Please ask or google for further explanation.