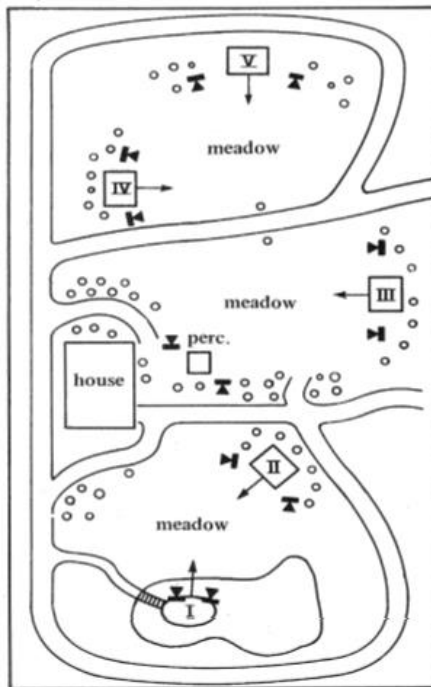




Star Sound

On the 29th August 2020, BCMG is going to perform an extraordinary piece of music by the composer **Karlheinz Stockhausen** called *Sternklang* in Hanover, Germany. *Sternklang* literally means '**star sound**'.



The piece is composed for **5 groups of 4 musicians** and a **percussionist**, positioned in the middle, who acts as a **controller**. The piece is designed to be played **outdoors** in a **park** on a warm clear night when you can see the **stars**. Here is a **map** of how the groups of musicians were arranged for the first performance.

Most of the time the musicians stay in their groups but sometimes musicians leave their group, accompanied by a **torch bearer(!)**, and take some of their musical ideas or notes to one of the other groups!

Many of the musical ideas in the piece come from the constellations: their **shape**, their **character** and even from the **vowel sounds** of their names. Here are some of the constellations turned into graphic scores by Stockhausen that the musicians use to improvise with.

<p>LEO der Löwe</p> <p>die "Sichel" des Löwen</p>	<p>LEO MINOR kleiner Löwe</p>	<p>URSA MAJOR grosser Wagen</p>
<p>CYGNUS Schwan</p>	<p>DELPHINUS der Delphin</p>	<p>CEPHEUS</p>

Translated into English they are: Leo = Lion, Leo Minor = Little Lion, Ursa Major = Big Bear, Cygnus = Swan, Delphinus = Dolphin, Cepheus = The King. **Have a look** at the constellations <http://www.seasky.org/constellations/constellations.html> and work out how Stockhausen has created the graphic scores.

In the musicians instructions for performing the piece are phrases like play '*in the rhythm of your smallest particles*' and '*in the rhythm of the universe*'.

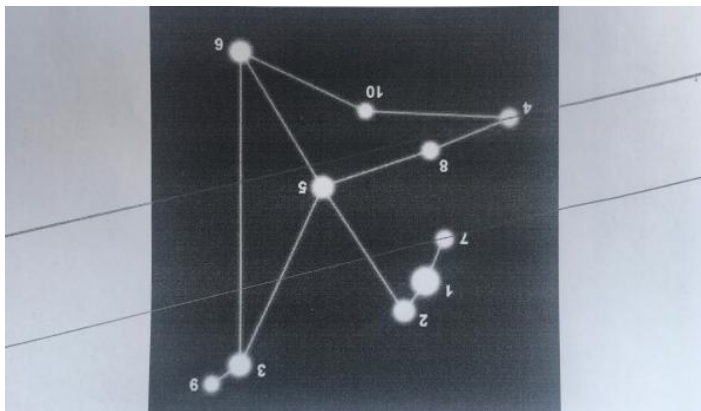
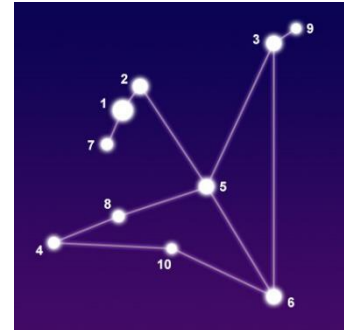
Your Turn!

Listen to this performance of *Sternklang* <https://youtu.be/gqXsA0Gu6DA>

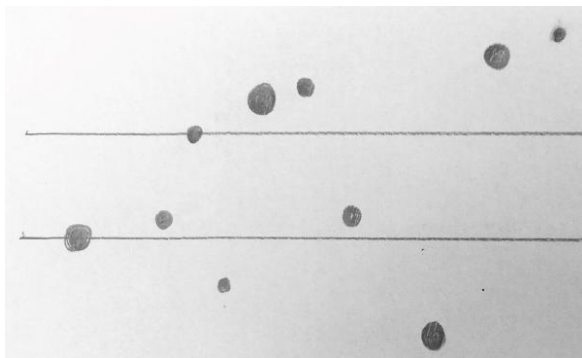
In this activity, we will take just one of Stockhausen's ideas - using constellations to create melodies. Pick a constellation from:

<http://www.seasky.org/constellations/constellations.html>.

Here is the constellation Aquila (Eagle):



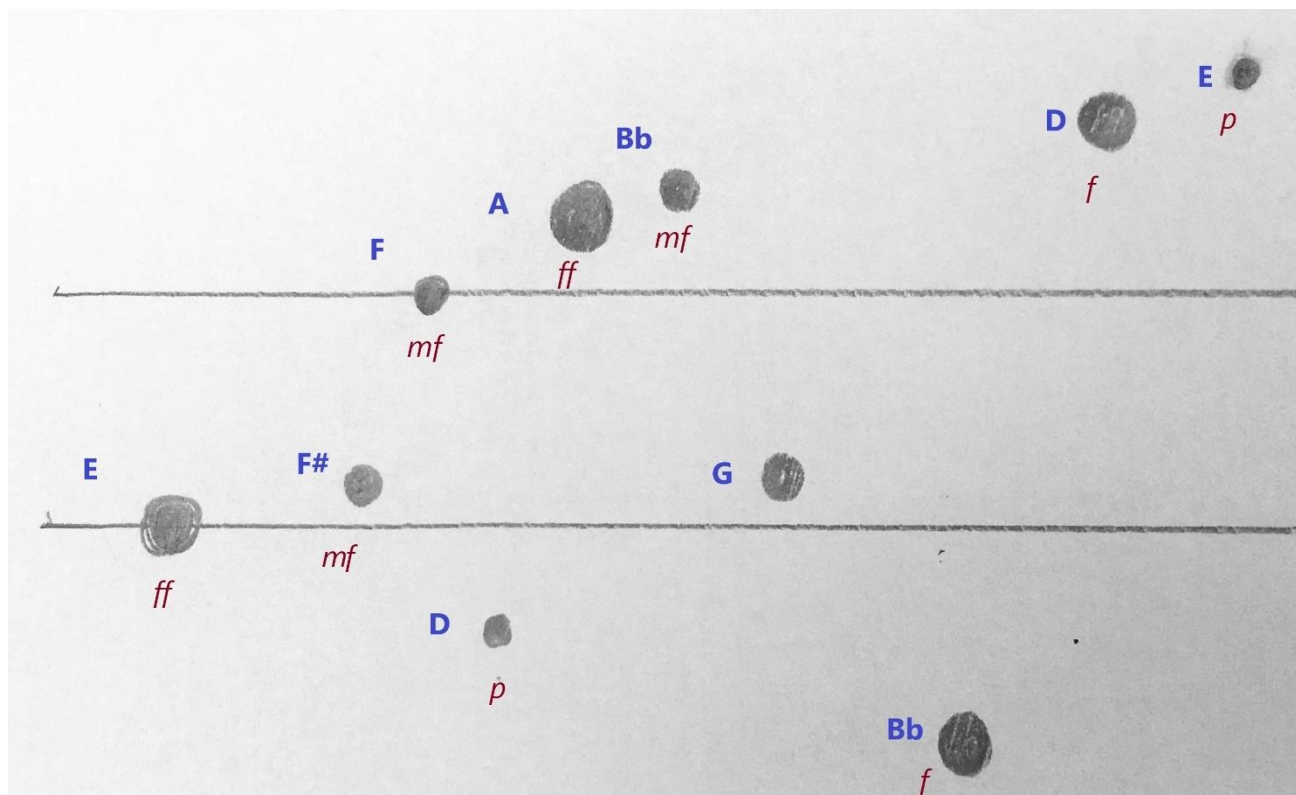
Print out your chosen constellation. Now **draw two parallel lines** through the constellation. All of the stars should be between, above or below the two lines. You can place the parallel lines at whatever angle you think best. This will help to stop stars appearing to be on top of each other.



Now **draw** out your constellation on a new piece of paper with the lines straight. Now **play** the melody the stars of your constellation have made, following these **rules**:

1. **Read** the stars from **left to right**
2. How **high** or **low** on the page a star is tells you how high or low to play your note.
3. The **spacing** between the stars gives you the **rhythm**
4. The **size** of the star tells you how loud or quiet to play the note. Stockhausen does this in *Sternklang*.
5. The **character** of the melody is given by what the constellation **represents** or their **story**. For example, Aquila, represents the eagle that carried Zeus' thunderbolts.

Play your melody a few times and **decide what note** you want for each star. **Write** the **note name** next to the star as well as how **loud or quiet** you're going to play it.



Choose a **new** constellation and **repeat** the above steps. You can use **any notes** you like but you might want to keep 1 or 2 of the same notes throughout. Repeat again until you have **2 - 4 constellations**. Now create some very **simple signal music** (e.g. a rhythm on one note) to play between each constellation and decide what order you will play your constellations.

Please send any music you create to learning@bcmg.org.uk

We would like to thank The Stockhausen Foundation for Music for the use of images from the score of *Sternklang*. This resource is for educational purposes only and is designed to illuminate and otherwise share the great work of the composer/sound designer Karlheinz Stockhausen. Please support The Stockhausen Foundation for Music by purchasing CDs, DVDs and scores from their website:

<http://www.karlheinzstockhausen.org/>

Thank you also to <http://www.seasky.org/> for allowing us to use their images.

