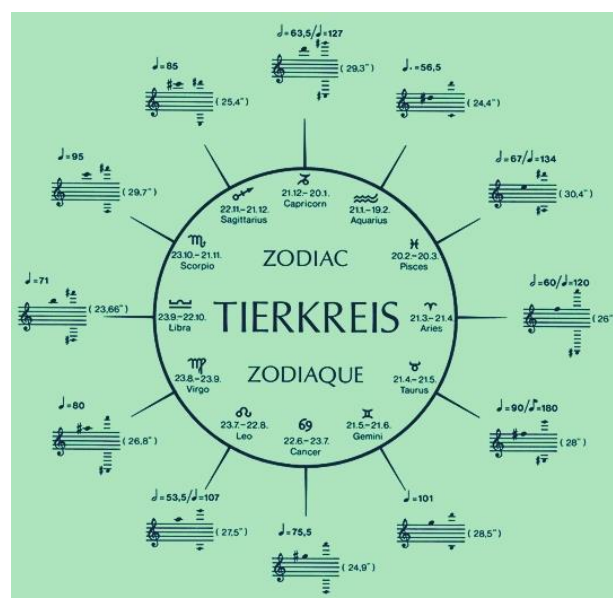# Zodiac

On Thursday 20 August 2020, **BCMG Cellist Uli Heinen** performed *Tierkreis* by the German composer **Karlheinz Stockhausen** in Brindley Place, Birmingham. *Tierkreis* is German for zodiac and the piece is made up of **12 short melodies**, one for each of the zodiac.

Stockhausen composed a number of pieces inspired by **stars** and **constellations** and was interested in **astrology** and **spirituality**. This is what Stockhausen said of the *Tierkreis* melodies:

*'In inventing each melody, I thought of the characters of children, friends, and acquaintances who were born under the various star signs, and studied the human types of the star signs more thoroughly.'*

There are lots of versions for different instruments including one for 12 specially made **music boxes**. Here is **Aquarius** composed for his daughter Julika:
https://vimeo.com/75744723

The *Tiekreis* melodies are part of a bigger piece of music called *Musik in Bauch* (music in the belly) which Stockhausen was inspired to compose when he remembered joking with his 2-year-old daughter Julika, that the noises coming from her stomach were *'music in (her) belly'*.



Each of the melodies has its own tone row, a tone row is group of notes/pitches in a particular order. Each of the melodies has a different note that is the **main note**. This note **starts** and **finishes** that melody and **appears throughout** the melody. Leo (Stockhausen's sign) = the note A, Virgo = A#, Libra = B, Scorpio =C and so on.

As well as being able to be played by different instruments, there are also many different versions including this **jazz** one by Uli's son Bruno Heinen. Here is his sextet playing **Scorpio**: https://www.youtube.com/watch?v=74VqQUnj5hI
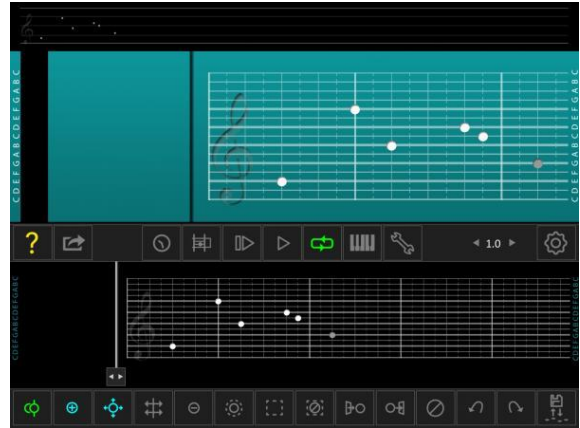
# Your Turn!

In this activity you are going to create your own **zodiac melody** for **music box**. **Music Box Composer** is an inexpensive app (Android and Apple) on which you can create and play music box melodies. You can also buy DIY 15 note music box kit

[https://www.amazon.co.uk/Crank-Music-Movement-Punch-Papers/dp/B0774YHXGS/](https://www.amazon.co.uk/Crank-Music-Movement-Punch-Papers/dp/B0774YHXGS/) which you can programme to play the melodies you have composed. Have a **play** and **learn** how the Music Box Composer app works.

Being a music box, you can't change the dynamics or the timbre (type/quality of sound) so this activity will focus on **pitch** and **rhythm**. Decide on **who** your melody will **describe** - a friend or family member. **Find out** what their **star sign** is and what characteristics are attributed to that star sign. This will give you the **character** of your music.



**Set up the app using the settings icon:** set the music box composer app to use **15 notes**. Don't allow **non-music box notes (sharps)**. Set the **snap interval** to **1/8**.

**Rules to create your melody:**

As we saw in the introduction, Stockhausen composed his melodies with certain rules about which notes he could use when. Below is a simplified version to guide how you compose your melodies:

- Notes can be added to your melody by simply touching the grid.
- Choose a **main note** (the notes are listed down the side). Your melody should **start** and **finish** on this note. You can use this note **as many times as you like** in your melody.
- All the other notes you are allowed to use **only once**. You can **repeat them consecutively** (immediately after each other) but **not return to them** later on in the melody. This is like how Stockhausen uses his tone rows.
- How **close** or **far apart** your place your notes will determine the **rhythm** of your melody.
- You can **speed up** or **slow down** your melody by changing the number - this goes from 0 (slow) to 4 (fast). This is a great way to change the **character** of your melody.

You can now:

- **Save** your melody
- **Share** your melody
- **Print** out your melody to play on a real music box
- **Create** a **new** zodiac melody for a different friend or family member