L3) The Organic Research Method
By Dr Robert Rose

The organic method of research is particularly relevant to the Natural Sciences, the Life sciences and the Biology (plant and animal) Curriculum. This section is is aimed at learning about what "life" means in a Steiner setting and how it manifests in the World and how teachers can begin to develop an imagination of it in themselves and introduce it to children.

It would be helpful at this point to read, or have read, chapter XVI, from the "*Theory…*". There Steiner describes the distinctive character of how to research "life" or the living World more generally. There are also indications in "*The Kingdom of Childhood*" chapter 3, where Steiner develops this method in connection with the curriculum such as plant and animal studies.

You might find it helpful to read these now.

The "*Theory…*" takes a slightly different approach than the "*Kingdom…*" in that it focuses on the inherent capacities of the living to express itself in particular conditions. The latter of these books looks more at the environment of plants and animals in a holistic way. The two approaches are complementary, but we will focus on the first of these here and return to the second next year in curriculum principles. For now, this section aims to be of a contemplative nature so that you can develop a sense for living world yourself.

It also needs to be noted that what comes below is more connected to the second third of the class teacher period, i.e. at around $9^{1}/_{3}$, in class 3/4, when the child begins to understand the world as "living – picture – fact" or as "Imaginative Fact".

The organic method, in a more general sense, is also particularly relevant to the upper school biology main lesson.

Steiner describes the difference between the organic and the inorganic in the following way:

"Every single organism is the moulding of the type in a special form. It is an individuality which governs and determines itself from a centre outward. It is a totality complete in itself — which in inorganic Nature is true of the cosmos alone. The ideal of inorganic science is to grasp the totality of all phenomena as a unitary system, in order that we may approach each phenomenon with the consciousness that we recognize it as a member of the cosmos. In organic science, on the contrary, the ideal must be to have in the utmost entirety possible in the type and its phenomenal forms that which we see evolving in the series of single beings. Tracing the type back through all phenomena is here that which matters. In inorganic science the system exists; in organic the comparison (of each single form with the type). "

Steiner, R (1888) *Theory of Knowledge… Ch XVI Organic Nature.*

At the time (ca 1880), the scientific method was dominated by an attempt to understand the living World through a mechanistic approach. Steiner considered this to be an inappropriate projection of the inorganic method onto the living realm. Following Goethe, Steiner wanted to cultivate an approach that was unique to the realm concerned, in this case the organic or living realm.

The method that Steiner advocated also aims to cultivate the scientific intuition and imagination through observation and human participation in nature's unfolding.

For Steiner, the organic research method has two basic processes:

A) Comparative process between whole life forms
and
B) Developmental / Evolutionary over time.

One of the first things to notice about Steiner's organic method is that it directed primarily at **whole** organisms. Many mainstream approaches focus on the genetic composition of living organisms or their environment. Whilst these also have their place in a Steiner setting, there is also the methodological need to research whole organisms for what they are in themselves. One might call this an intrinsic understanding of living organisms, both in their comparison with other living organisms as well as their developmental and evolutionary processes.

In the following, the aim is to develop an understanding and imagination of the living metamorphosis of plants and animals. Each of the pictures represent a number of stages that the living beings of the world undergo. **Please observe them carefully.**

In the following, consider a few practical examples:

1) Dandelion. 2) Fern. 3) Butterfly . 4) Frog. 5) Human

In each case, try to create an inner picture, in your memory and imagination, of the process the being undergoes in its development. You may like to draw these in order to help you create this **series of inner pictures** which transform from one to the other in accord with the organism.

Once you feel ready, try to describe in your own words the "metamorphosis" between the different forms or stages of each plant. Try then to compare the two plants.

You may find that you will need to create / imagine some realistic in-between forms, this would help with further observation.

You might like to try this with other living creatures that you may have in your garden or which you may see on a walk.

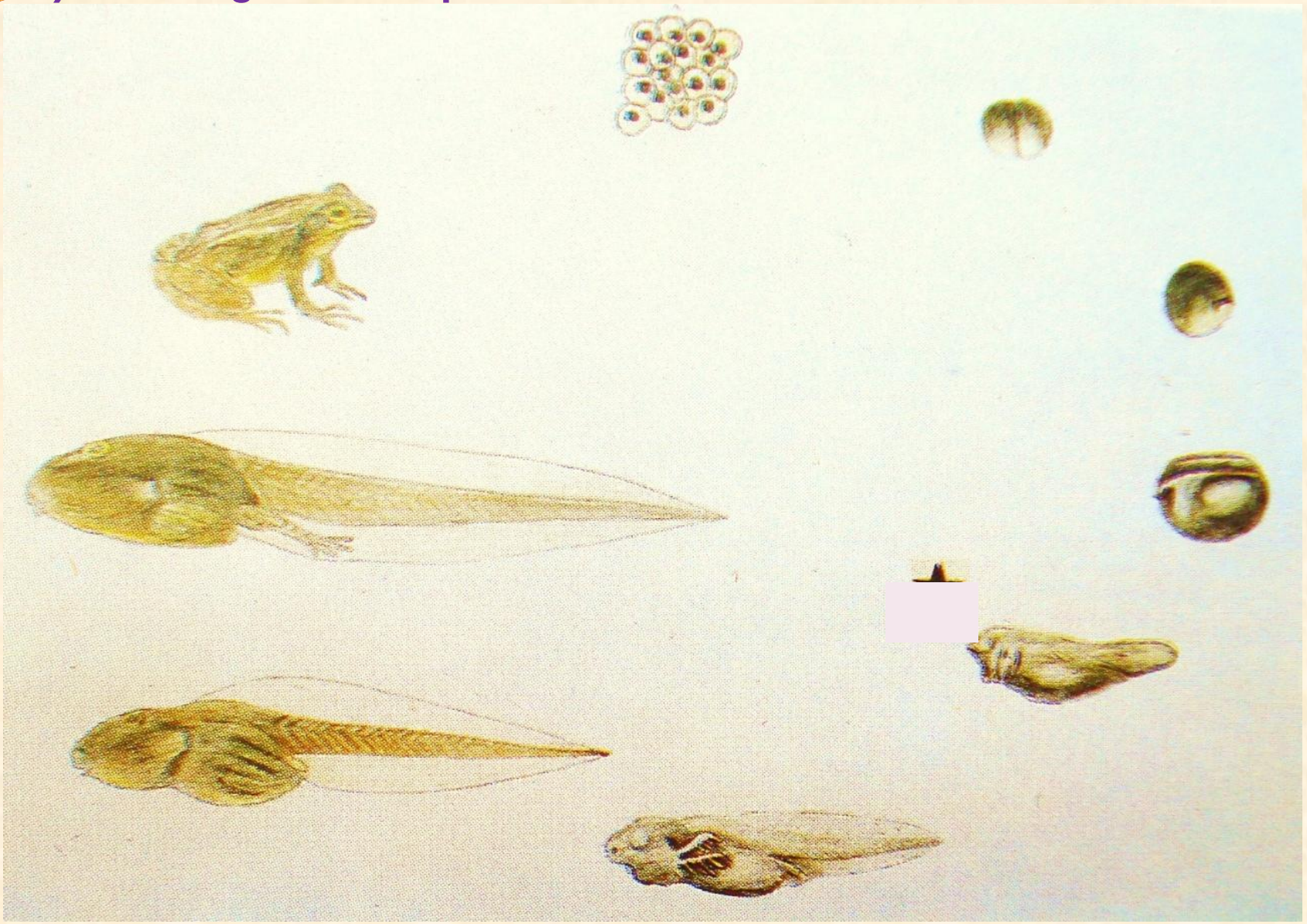
Take your time and ask yourself the question: "what is the life process?".

1) The Dandelion in Metamorphosis

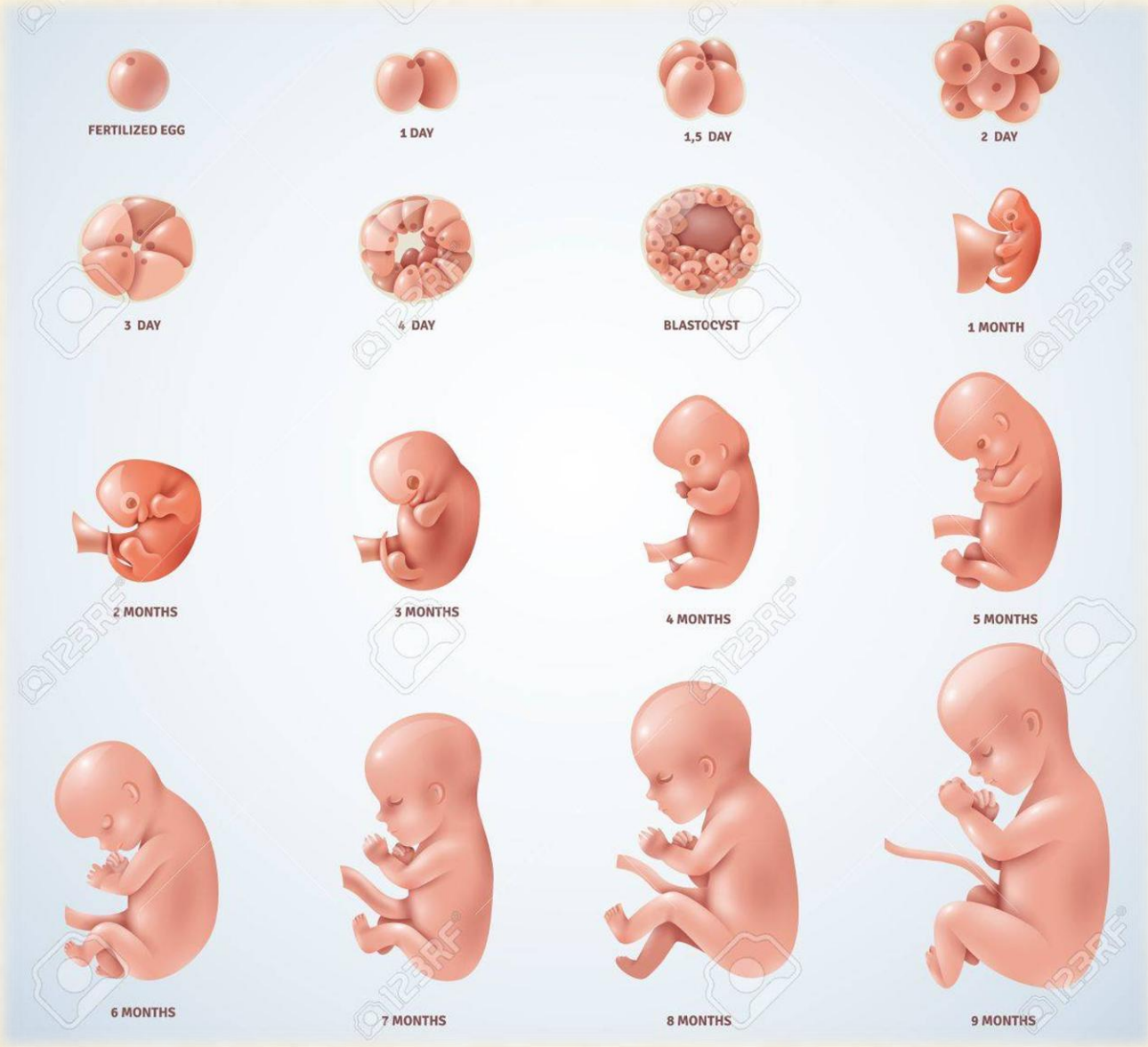
2) The Fern in Metamorphosis

3) The Butterfly

4) The Frog metamorphosis



5) Human metamorphosis



Exercise

1) Try to write a poem or a song about an organism of your choice and which is to include essential elements of its metamorphosis.

2) Make a water colour painting or do a coloured chalk drawing on black paper or card which captures the essence of the organism of your choice.

3) Piece together a "mini lesson" on this organism using the basic form Steiner suggested for teaching:

1) Poem / Song

2) Content of lesson (e.g. a butterfly) including writing practice.

3) Artistic activity (painting/drawing/clay modelling).

Find a friend to whom you can present your mini-lesson. Get feedback from them and reflect on the process.