

STEAM Trail

Class Level: Junior/Senior Infants

This document presents a range of activities and associated resources that could be used for a STEAM trail on the school grounds. Teachers are free to choose the sections from this document that they wish to complete with their class. The child can think about and discuss the answers, draw or write the answers or record their responses using digital technology.

Before leaving the classroom (Teacher Led)

(Children might enjoy exploring the story of The Gruffalo prior to completing these activities)

Sensory Check in:

- Look out the window
- What can you see? Can you hear anything?

Weather Prediction:

- Can you see the sky? Are there clouds in the sky? What shapes can you see in the clouds?
- Do you think it will be warm or cold when we go out? Will we need coats?
- Do you think it is windy/breezy? Why do you think this?

Route Preparation: (Teacher explains where the children will be walking to)

- Will we be walking on hard or soft surfaces?
- Are there any hazards along the way?
- Are there any areas we should avoid?
- Do you think the ground will be wet or dry? How do you know?
- How many steps do you think we will take to get there?
- How many seconds/minutes do you think it will take us?

Go to Destination

- Guide children to the selected starting point on the school grounds and establish clear boundaries
- Encourage children to look back at the school building, and see if they can identify the window, or the location of the window which they looked out of
- Talk about how many steps they took to get to the location, and how many minutes/seconds it took

Activity A: A Home for Mouse

Read the following poem to the children:



*Dear boys and girls, I hope that you can help me today,
 I was in the deep dark wood, and now I have lost my way,
 I can't find my friends, I have nowhere safe to stay,
 Can you look around your school grounds for somewhere I can lay,
 I don't like loud noise, and I like to be somewhere warm,
 I like a soft, cosy bed, and shelter from a storm,
 Please have a look around, I can't wait to see what you choose,
 I'll be arriving shortly, looking forward to a snooze!*

- After reading the poem to the children, discuss the considerations when choosing a home for mouse.
- Can we find a safe place for mouse?
- What size does his home need to be? As big as your hand? Bigger than your hand? Smaller than your hand?
- How can we make sure that he has some shelter?
- When you choose your home, explore it and see if there is anything around it that makes it unsafe for mouse?
- Can you take a photograph of mouse's new home?

Activity B: Mouse's favourite number

- Do you have a favourite number? Mouse's favourite number is 4.
- To welcome him to his new home, can you find objects in the school ground that will show the Number 4. This will help mouse to find his way to the home you have chosen for him.
- How can we represent the number 4?



Possible Extension Activity: Ask children to create a nature number line.



- Mouse told us that he doesn't like loud noises. Let's pick a spot in the yard and check what sounds we can hear. Tick them off on your checklist.
- Are they loud or soft sounds?
- Can you hear any other sounds that you could add in to the two boxes at the end?

Outdoor Sound Walk

Can you hear these sounds?

 Car	 Dog barking	 Leaves rustling
 Birds singing	 Children playing	 Bees buzzing
 Lawnmower		

Creative/Open-ended activity

We want to welcome mouse to our school by creating some colour palettes for him to enjoy. We can hang them on the classroom window for him to admire when he arrives. Can you have a look around the school yard and observe and collect a range of colours?

Autumn Colour Palette

The creation of an Autumn-themed colour palette is a really enjoyable way for pupils to observe and collect a range of colours in their local environment. For this activity, pupils collect as wide a range of natural colours as they can find in a given area, sticking tiny bits of each colour to the palette. The palettes can be made from thin white card and double-sided sticky tape (one-sided tape can be used too once doubled over). Encourage your pupils to look for colour in a range of locations around the school grounds.

Suggested Questions:

- What colours did you find?
- Where did you find them?
- Are the colours bright or dark?
- If you made a colour palette in winter, would the colours be the same?



Back in the Class: Follow-up Activities

Additional Activities/Resources

Indoor Sound Walk: STEM Smaointe 3:

<https://spark.adobe.com/page/yYkhBH41O2i3w/>

Make a mouse house activity sheet:

<https://i.pinimg.com/originals/35/a4/04/35a404763a0976283328ffe23f77f764.jpg>

Maths Trails Questions suitable for Infants

<https://www.mathsweek.ie/2017/puzzles/maths-trails>

Alternative Picture books which may be used as a stimulus

"Rosie's Walk" by Pat Hutchins

"We're going on a bear hunt" by Michael Rosen

"Stick Man" by Julia Donaldson

Rian ETIEM

Leibhéal Ranga: Na Naíonáin Shóisearacha/Shinsearacha

Cuirtear raon gníomhaíochtaí agus acmhainní lena mbaineann i láthair sa doiciméad seo a d'fhéadfaí a úsáid le haghaidh rian ETIEM ar thailte na scoile. Is faoin múinteoir atá sé na codanna den doiciméad sin ar mian leis a dhéanamh lena rang a roghnú. Is féidir leis an leanbh smaoineamh faoi na freagraí agus plé a dhéanamh orthu, agus is féidir leis iad a tharraingt, a scríobh nó iad a thaifeadadh trí theicneolaíocht dhigiteach a úsáid.

Roimh daoibh an seomra ranga a fhágáil (Faoi stiúir an mhúinteora)

(Seans go mbainfeadh na leanaí sult as an scéal An Garbhán a iniúchadh roimh dóibh tabhairt faoi na gníomhaíochtaí seo)

Na céadfaí a mhúscailt:

- Féachaigí amach na fuinneoga.
- Cad a fheiceann sibh? An féidir libh aon rud a chloisteáil?

Tuar na hAimsire:

- An bhfeiceann sibh an spéir? An bhfuil scamail sa spéir? Cé na cruthanna a fheiceann sibh sna scamail?
- An gceapann sibh go mbeidh sé te nó fuar nuair a rachaimid amach? An mbeidh cótaí ag teastáil uainn?
- An gceapann sibh go mbeidh gaoth láidir nó gaoth éadrom ann? Cén fáth a gceapann sibh é sin?

An bealach a ullmhú; (Míníonn an múinteoir cén áit a mbeidh na leanaí ag dul)

- An mbeidh na dromchlaí ar a mbeimid ag siúl crua nó bog?
- An mbeidh aon bhaol ar an mbealach?
- An bhfuil aon áit go mba cheart dúinn a sheachaint?
- An gceapann sibh go mbeidh an talamh fliuch nó tirim? Cén chaoi a bhfuil a fhios agaibh?
- Cé mhéad coiscéim a bheidh ag teastáil chun an ceann scríbe a bhaint amach, meas sibh?
- Cé mhéad soicind/nóiméad a bheidh ag teastáil uainn, meas sibh?

Téigí chuig an gCeann Scríbe

- Treoraigh na leanaí chuig an túsphointe roghnaithe ar thailte na scoile agus leag síos teorainneacha soiléire

- Spreag na leanaí le breathnú siar ar fhoirgneamh na scoile agus feicfidh tú an bhfuil siad in ann an fhuinneog, nó suíomh na fuinneoige, ónar fhéach siad amach a shainnithint
- Labhair faoin méid coiscéimeanna a thóg siad chun an ceann scríbe a bhaint amach, agus cé mhéad soicind/nóiméad a bhí ag teastáil.

Gníomhaíocht A: Baile do Luch

Léigh an dán seo do na leanaí:



A ghasúir is a ghirseacha, an gcabhróidh sibh liom inniu?

Ba sna coillte dorcha, dlúithe a bhíos, nuair a chuaigh mé amú,

Do chaill mé mo chairde, is ní féidir liom cur fúm,

An n-aimseodh sibh áit, nó scáthlán dom fiú?

Ní mór an tsíocháin agus ní mór an tost, mar aon leis an teas is mar aon leis an só!

Foscadh ó anfa a theastaíonn uaim, agus leaba breá mór, nach hin an bhrionglóid bhuan?

*Dá dtabharfaí súil mórthimpeall oraibh, is cinnte go dtiocfaí ar nead mo bhrionglóidí
 Ní fada anois go dtí go bhfeicfidh mé sibh is an nead teolaí sin a aimseoidh sibh!*

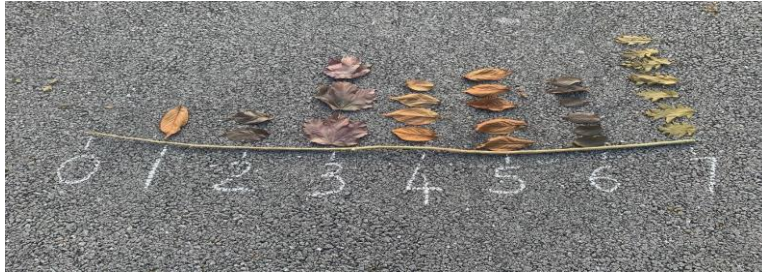
- Tar éis duit an dán a léamh do na leanaí, pléigh na ceisteanna nach mór aire a thabhairt orthu agus baile á roghnú do Luch.
- An féidir linn áit shábháilte a aimsiú do Luch?
- Cé chomh mór nó cé chomh beag a chaithfidh baile Luiche a bheith? Chomh mór le do lámh? Níos mó ná do lámh? Níos lú ná do lámh?
- Conas gur féidir linn a chinntiú go mbeidh foscadh aige?
- Nuair a bheidh an baile roghnaithe agaibh, déanaigí gach cuid de a iniúchadh agus féachaigí an bhfuil aon rud ann a d'fhéadfadh Luch a chur i mbaol?
- An féidir libh grianghraf a ghlacadh de bhaile nua Luch?

Gníomhaíocht B An uimhir is fearr le Luch

- Cén uimhir is fearr libhse? Is é a 4 an uimhir is fearr le Luch.
- Chun fáilte a chur roimhe ina theach nua, an féidir libh rudaí a aimsiú ar thailte na scoile a bhfuil uimhir a 4 orthu nó a léiríonn uimhir a 4? Cabhróidh sé sin le Luch socrú síos sa teach nua a roghnaigh sibh dó.
- Cén chaoi ar féidir linn uimhir a 4 a léiriú?



Gníomhaíocht Fairsingithe a d'fhéadfaí a dhéanamh: Tarr ar na leanaí uimhirlíne a chruthú ag úsáid rudaí ón dúlra.








Stop agus réitigh - Siúlóid fuaimne

- D'inis Luch dúinn nach maith leis fuaimneanna arda. Roghnaímis spota sa chlós agus seiceálfaimid cé na fuaimneanna gur féidir linn a chloisteáil ann. Cuirigí tic leis na fuaimneanna sin ar bhur seicliosta.
- An fuaimneanna arda nó fuaimneanna ísle iad?
- An féidir libh fuaimneanna ar bith eile a chloisteáil a d'fhéadfaí a chur sa dá bhosca ag an deireadh?

Siúlóid Fuaimne Lasmuigh

An féidir libh na fuaimneanna seo a chloisteáil?

 Carr	 Madra ag tafann	 Duilleoga ag siosarnach
 Éin ag ceol	 Páistí ag súgradh	 Beacha ag cránán
 Lomaire faiche		

Gníomhaíocht chruthaitheach/Neamhiata

Ba mhaith linn fáilte a chur roimh Luch go dtí ár scoil trí roinnt pailéid dathanna a chruthú dó le sult a bhaint astu. Is féidir linn iad a chrochadh ar fhuinneog an ranga chun gur féidir leis sásamh a bhaint astu nuair a thiocfaidh sé.

An féidir libh súil a chaitheamh timpeall an chlóis scoile chun raon dathanna a aimsiú agus iad a bhailiú?

Pailéid Dathanna Fómhair

Is bealach an-taitneamhach é pailéad dathanna fómhair a chruthú chun go dtabharfaidh daltaí réim dathanna faoi deara ina gceantar áitiúil agus go mbaileoidh siad iad. Le haghaidh na gníomhaíochta seo, baileoidh na daltaí a oiread dathanna nádúrtha agus is féidir a aimsiú in áit faoi leith agus greamóidh siad giotáí beaga de gach dath den phailéad. Déantar na pailéid as stiall chaol de chárta bán agus as téip atá greamaitheach ar an dá thaobh (is féidir téip aontaobhach ghreamaitheach a úsáid ach í a fhilleadh uirthi féin). Spreag do dhaltaí le dathanna a lorg i raon áiteanna timpeall thailte na scoile.

Ceisteanna molta:

- Cé na dathanna a d'aimsigh sibh?
- Cén áit ar aimsigh sibh iad?
- An dathanna geala nó dorcha iad?
- Dá gcuirfimis pailéad dathanna le chéile sa gheimhreadh, an mbeadh na dathanna céanna i gceist?



Ar ais sa seomra ranga: Gníomhaíochtaí Leantacha

Gníomhaíochtaí/Acmhainní Breise

Siúlóid Fuaimne Faoi Dhíon: STEM Smaointe 3:

<https://spark.adobe.com/page/yYkhBH41O2i3w/>

Bileog gníomhaíochta - Cruthaigh teach luiche:

<https://i.pinimg.com/originals/35/a4/04/35a404763a0976283328ffe23f77f764.jpg>

Ceisteanna do Rianta Matamaitice atá feiliúnach do Ranganna na Naíonán

<https://www.mathsweek.ie/2017/puzzles/maths-trails>

Leabhair Pictiúr Mhalartacha a d'fhéadfaí a úsáid mar spreagthach

"Rosie's Walk" le Pat Hutchins

"We're going on a Bear Hunt" le Michael Rosen

"Stick Man" le Julia Donaldson