

## Playpak

Attaco

#### Program aktivít

Sprievodca pre rodičov pri výbere aktivít na zlepšenie mobility, schopností a účasti (MAP)

fireflyfriends.com





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## **ČASŤ 1** ÚVODNÉ INFORMÁCIE O PLAYPAK A PLAYPAK PROGRAME AKTIVÍT



## Tak teda začnime!

S Playpakom môžete vytvárať rôzne aktivity na rozvoj mobility, schopností a zúčastnenia sa vášho dieťaťa pomocou programu aktivít Playpak.

Môžete sa samozrejme rozhodnúť, že svojmu dieťaťu dáte Playpak jednoducho na sedenie na podlahe a na hranie sa - veľa rodín to rado takto robí. Avšak starostlivým výberom aktivít, ktoré vaše dieťa v Playpaku vykonáva, môžete pracovať na rozvíjaní jeho schopností v mnohých oblastiach.

V tejto brožúre vám poskytneme pomoc a vedenie od našich kvalifikovaných ergoterapeutov, aby sme vám pomohli vyťažiť z vášho Playpaku maximum.



## Čo je to Playpak?

Playpak je pomôcka na ľahké aktivity, ktorá obsahuje rôzne valčeky, kliny a podpery . Tieto komponenty umožňujú dieťaťu dosiahnuť rôzne polohy vrátane sedenia, ležania na chrbte a brušku.

Playpak sa skladá zo siedmich vecí: taška / podložka, malá podkova, veľká podkova, podpera bruška/ hlavy, remienok / opasok, dlhý a krátky valček. Playpak je dodávaný v taškovej podobe so všetkými súčasťami a môžete si ich nakonfigurovať podľa vlastného uváženia (o čom sa ďalej hovorí v časti 2).

Playpak je založený na systéme Squiggles Early Activity System, produkte Leckey (www.leckey.com). Leckey je spoločnosť známa na celom svete výrobou posturálneho vybavenia pre deti so špeciálnymi potrebami a je tiež materskou spoločnosťou Firefly. Firefly sa však zameriava na účasť rodiny na aktivitách s deťmi so špeciálnymi potrebami.



Systém Squiggles Early Activity System je populárny produkt, najmä na použitie v terapeutických centrách; Firefly však chcel vytvoriť prenosnú a dostupnejšiu verziu. Naši dizajnéri spolupracovali s lekármi na príprave súpravy aktivít, ktorá by umožňovala terapiu doma aj na cestách - Playpak!



## Kto môže používať Playpak?

Playpak je vhodný pre kojencov a malé deti so špeciálnymi potrebami od narodenia do približne 48 mesiacov. Pre Playpak neexistuje žiadne hmotnostné obmedzenie; avšak maximálna šírka sedu veľkej podpery v tvare podkovy je 25 cm , takže ak ju vaše dieťa prekročí, bude príliš veľké na to, aby mohlo sedieť pomocou podpier v tvare podkovy Playpak.

Playpak môžu deti používať na ktorejkoľvek úrovni stupnice klasifikácie Gross Motor Function Classification Scale (GMFCS). Ak má vaše dieťa extrémny svalový tonus, môže byť pre neho ťažšie dosiahnuť a udržať niektoré polohy. Možno budete chcieť požiadať svojho terapeuta o radu alebo nás kontaktujte. Podrobnosti nájdete na konci v časti 2. Schopnosti vášho dieťaťa sa môžu objaviť aj neskôr a preto sú v Playpaku schopné zvládnuť iba krátky čas, až kým sa neunavia. To je v poriadku - prispôsobte sa ich tempu a časom si môžu vybudovať potrebné zručnosti a vytrvalosť. Dĺžka používania Playpaku sa líši v závislosti od schopností vášho dieťaťa, jeho nálady a dennej doby, takže je dôležité striedať náročné polohy s ľahšími, kým svoje schopnosti trochu nevybudujú a nerozvinú viac.

Ak sa vášmu dieťaťu páčia aktivity s Playpak, v takom prípade môže byť vhodné aj každodenné používanie. Ak sa u nich objavia posturálne schopnosti alebo problémy so zmyslovým vnímaním, možno zistíte, že musíte ísť pomalšie. Nechajte sa viesť svojim dieťaťom. Nenechajte ich príliš sa unaviť, pretože by to mohlo mať vplyv na ich schopnosti v iných každodenných činnostiach.



Niektoré deti, ktoré používajú podporné podkovy, potrebujú aj ďalšie oporné komponenty, pretože sú príliš vysoké. Vtedy môžete použiť komponenty z Playpaku alebo zakúpiť ďalšie podpory, aby ste svojmu dieťaťu poskytli potrebnú oporu.

## Čo je to Playpak program aktivít?

Program aktivít Playpak poskytuje sériu starostlivo vybraných polôh a aktivít, ktoré môžu prispieť k rozvoju schopností vášho dieťaťa.

Program má tri kľúčové oblasti: Mobilita (M), Schopnosť/ Ability (A) a Účasť/ Participation (P). Toto je MAP:

#### • MOBILITA (M)

je schopnošť vášho dieťaťa vstúpiť do svojho sveta a získať čo najväčšiu samostatnosť;

#### SCHOPNOSŤ (A)

sa týka všetkých aspektov fyzického, kognitívneho a sociálneho rozvoja vášho dieťaťa;

#### Účasť (P)

spočíva v ťom, že umožníte dieťaťu zažiť čo najviac aktivít.

Tento program aktivít sa zameriava na polohy, ktoré môže vaše dieťa v Playpaku dosiahnuť, ako nastavovať komponenty Playpak na dosiahnutie týchto polôh a na činnosti, ktoré vaše dieťa môže v jednotlivých polohách vykonávať.

V Playpak programe aktivít sa zameriavame na 5 pozícií:

- Ležanie na chrbte (supinačná poloha)
- · Ležanie na bruchu (pronačná poloha)
- Ležanie na boku
- Sedenie
- · Lezenie po štyroch



Tento program obsahuje aj hodnotenie schopností MAP. MAP Ability Assessment, ktorý vám umožňuje zaznamenávať dosiahnuté schopnosti vášho dieťaťa a kontrolovať ich po určitom období používania Playpaku. Pretože Playpak umožňuje deťom dosiahnuť rôzne polohy a robiť aktivity, ktoré by inak mohli byť pre nich ťažké, zameriava sa do veľkej miery na "schopnost". Program aktivít Playpak však pomôže rozvíjať zručnosti vášho dieťaťa v oblasti mobility, schopností a účasti.

Deti sa vyvíjajú rôznym tempom a "typický" vek dosiahnutia vývojových míľnikov sa môže veľmi líšiť. Deti však majú tendenciu nasledovať podobný model pokroku. Na vývoj detí môže mať vplyv veľa faktorov, vrátane ich zdravia, fyzických schopností alebo prostredia.2 Pre niektoré deti môže byť udržanie jednej pozície v Playpaku najlepším výsledkom, aký môžu v danom okamihu dosiahnuť, a to je úplne v poriadku stačí ísť ich tempom.

Udržiavanie bezpečnej a pohodlnej polohy dáva deťom príležitosť rozvíjať veľa zručností. V tejto brožúre sa zameriavame na rozvoj hrubej motoriky, jemnej motoriky, vizuálnej motoriky, senzorických a komunikačných schopností (tieto termíny terapie sú vysvetlené na strane 57). Tieto zručnosti pokrývajú oblasti Mobility, Schopnosti a Účasti v každej polohe s Playpak.

Poznáte svoje dieťa lepšie ako ktokoľvek iný a budete tak schopní zistiť, ktoré aktivity môže dokončiť alebo ku ktorým sa dopracuje časom. Pamätajte, že každé dieťa je iné a schopnosti vášho dieťaťa nemusia byť rovnaké ako majú ostatné deti. Mali by ste si zvoliť aktivitu, ktorá je podľa vás pre vaše dieťa dosiahnuteľná.

## Hodnotenie aktivít

Hodnotenie znamená uľahčenie alebo sťaženie úlohy vášmu dieťaťu, aby bola akákoľvek aktivita o niečo jednoduchšia alebo náročnejšia. To môže byť skutočne užitočné pri práci na dosahovaní cieľov v Playpaku. Každá pozícia obsahuje návrhy odstupňovaných aktivít ako sprievodcu, ktorý vám pomôže začať (pozri časť 2), ale môžete medzi nimi vytvárať fázy, ktoré vyhovujú schopnostiam vášho dieťaťa. Napríklad:

ZOSTAVA		STREDNE ŤAŽKÁ	ŤAŽŠIA
	Umiestnite veľké alebo stredne veľké kúsky lega alebo Dupla na podlahu v blízkosti dieťaťa a povzbuďte dieťa, aby ich dvíhalo	Zoberte jeden kus a dajte ho do druhej ruky; Vezmite kocky lega a spojte ich oboma rukami	Vytvárajte tvary a vzory z menších kúskov lega
je dlhší zoznam a h si môžete vybrať a na stranách 60 - e alternatívy k navrl ám.	v časti 67, ak		

### Overview of the Playpak Therapy Programme



Read the user manual

Repeat at regular intervals, for example once per month Choose a position you want your child to work on



Don't overdo it! Try to practice activities little and often

Choose **mobility**, **ability** & **participation** activities to work on using the **map activities worksheet** 



Review progress using grading and map ability assessment

## **SECTION 2** THE PLAYPAK THERAPY PROGRAMME



## **Activites in Playpak**

Once you receive your Playpak and have read the User Manual, it's time to choose a position for your child to work on. As mentioned earlier, there are five different positions that can be achieved using Playpak:

- 1. Back lying (supine)
- 2. Tummy lying (prone)
- 3. Side lying
- 4. Sitting
- 5. Four-point kneeling

You can alternate between positions as much as you like, depending on your child's current skill level.

Once you have chosen a position for your Playpak session, it's time to decide what your child will do in this position! There are plenty of fun activities that your child can enjoy in Playpak. Not only are they fun but they can also have therapeutic benefits including the development of gross motor skills, fine motor skills and communication skills.

This Playpak Therapy Programme will guide you through a selection of activities which your child can carry out in each Playpak position. It is important to remember the effort that it can take for your child to maintain their position in Playpak, regardless of what activity they are carrying out.



The position that you place your child in and the play or communication activity that you choose for your child in that position are equally important. However, your child's level of ability in a certain position will determine how difficult an activity they can manage. Think of a seesaw - with an activity on one side and a Playpak position on the other. If the activity is easy for your child, they can probably carry it out in a more difficult position; or vice versa if the activity is challenging, try it in a position that your child finds easier. For example, if your child finds it hard to sit up, most of their energy will be working towards sitting up – so choose a simple activity for them. Likewise if you are aiming to introduce new words or phrases to develop listening and understanding skills, then you will need to choose an easier position or provide more support. That way, your child is not over-loaded and is more likely to experience success.



## Back Lying (supine)

#### Why is back lying important?

This is the most fundamental of developmental positions. When your child lies on their back, their full body weight is symmetrically supported by the surface. This makes it a very secure position from which to work on the physical, cognitive, sensory, and communication skills that provide the building blocks to more complex skills.

#### Setting up Playpak for back lying position

Typically, children will lie on their backs on the Playpak mat and use the headrest to support their head. Alternatively, parents often use the short roll to provide head support.

The strap/belt can be used to secure your child's hips, as seen in the photograph on the right below. You can also support your child using the rolls at their sides.

You can use the rolls to support your child's feet and/or to stop them sliding down the mat. If your child has tight hamstrings, you can place a roll under their knees to make them more comfortable.

#### Activities in back lying position

Remember to go at your child's pace and grade the activities to suit their ability. See page 12 for information on how to grade. In addition to the activities below, a list of activities can be found in the Resource section (p.60–67). From here, you can choose activities that best suit your child and the developmental area you want to work on (e.g. gross motor skills, fine motor skills, and bilateral coordination). On the next page there are some activities you can carry out with your child in the back lying position.





## **Back Lying Position**

	BACK LY	ING POSITION	
SKILL AREA	EASY	MEDIUM	HARDER
GROSS MOTOR ARM & FEET ACTIVITY	Hold on to your child's legs and help them to "bicycle" their legs	Encourage your child to bring their hands and legs together in the midline by placing their favourite toy in front of them	Assist rolling to the left and then to the right This helps to strengthen tummy, legs and feet, and the reciprocal movement is one which is needed for later weight bearing or movement
FINE & VISUAL MOTOR TRACKING OBJECTS	Place a brightly coloured object (such as a mobile or activity gym) about 30-40cm above your child's face	Move the object from left to right through a quarter circle, then back, going slowly enough so your child's eyes can follow it	Hold the object 40-50cm from your child's face and move it through a semi-circle to encourage head movements This midline position is good for symmetry, and your child is beginning to learn to use both sides of their body together
REACHING FOR OBJECTS		Encourage your child to reach across their body with left hand to swipe at a toy on the right side, and vice versa. Place your hand behind their shoulder to assist if necessary	Remove the pelvic strap and move the toy a little further out of reach. Your child should need to shift their weight at their hips to reach the toy.
in the resourc to choose oth and partici activities your ch	er ability pation s for		



#### Communication

In the back lying position it is easiest for your child to focus his eyes on familiar faces held near to his own face. First, children prefer to look at eyes, before learning to hold their gaze for longer and becoming more interested in objects. As children become more aware of the people and objects around them, they will develop skills in paying attention, concentrating and turn-taking – all early stages of communication, language and speech. When lying on their backs, it is easiest for children to you copy their sounds back to them and sing songs and rhymes for them to listen to and try to join in.

#### Sensory skills

When your child is lying on their back it is easiest to keep their eyes focused on a dangling object. As your child becomes aware of their hands and feet and takes them to their mouth, their eye-hand coordination and fine motor skills are developing. Even the sensations that your children receive through the back of their body will be helping to develop a sense of front and back. Likewise, the feedback received through the joints and muscles in their limbs (known as proprioception) gives important information about body position in relation to environment.

If you have positioned Playpak to achieve different goals or to facilitate play/therapy in ways not mentioned above, we would love to hear from you. You can find our contact details in the 'Contact Us' section of this booklet.

## Tummy Lying (Prone)

#### Why is tummy lying important?

Tummy lying is sometimes a difficult position for little ones as they have to struggle against gravity to lift their heads. It is however also important for developing and strengthening muscles. Research has shown that about one half of typically developing infants show some delayed development by six months of age if they are never placed on their tummies when awake<sup>1</sup>. This makes it especially important to have some daily tummy time.

> You can encourage your CHILD's tolerance of this posture by lying them on your stomach or lying on the floor with an older child

The extensor muscles (back muscles) of children with developmental delay tend to be weaker<sup>2</sup>; however lifting head and shoulders up against gravity helps to strengthen these extensor muscles. This is also helpful for children with low tone muscles and is an important foundation for the development of sitting.

Hand development is also promoted in tummy lying (prone), as body weight is taken through the bones, joints and muscles of the hands. Once head control is developing, hand co-ordination and spatial awareness can also be worked on.

Foot development can also be encouraged in prone, with carefully placed rolls or toys – see the activity suggestions later on.



#### Setting up your Playpak for tummy lying

The configuration(s) you choose to work on your child's tummy lying will depend on their level of head and trunk control, as well as upper limb strength. If your child is somewhat confident in these areas, you can use a roll or a horseshoe to support their trunk or arms. This will provide them with minimal support and allow full range of movement.

For children who aren't as strong in these areas, you can build the level of support using the horseshoes. The horseshoes prop the trunk and allow the child to focus on developing their head control.

You can incorporate some of the other components to make tummy lying as comfortable as possible for your little one. As you can see in the picture on the right, the headrest and long roll are supporting the child's head and arms while she perches on the short roll. Pillows can also be wedged in between the horseshoes for further trunk support and you can add the strap/belt for extra security.

Tummy-Lying is a precursor for floor sitting and four-point kneeling

#### Activities for tummy lying

Many activities can be carried out in tummy lying. However, the activities your child will be able to complete may depend on their level of head and trunk control. Those with poor head and trunk control will find this position more difficult than those who have developed head and trunk control - and that's perfectly fine, just remember to go at your child's pace and grade the activities for their ability (see p.12 for Grading).

Because tummy lying is a challenging position, achieving this position is a skill in itself. As a result, the list of activities for tummy lying is small in comparison to other Playpak positions.

A list of activities can be found in the Resource section (p.60–67). From here, you can pick and choose activities that best suit your child and the developmental area you want to work on (e.g. gross motor skills, fine motor skills, bilateral coordination).

Below are some suggested, graded activities you can carry out with your child in the tummy lying position.

For taller children, you can purchase an additional large horseshoe and stack on top of your existing horseshoe support.

## **Tummy Lying Position**

TUMMY LYING POSITION			
ACTIVITY	EASY	MEDIUM	HARDER
GROSS MOTOR HEAD LIFT	Hold child's favourite toy in front of them and encourage them to lift their head slightly	Move child's toy slowly from side to side and encourage them to turn their head to follow it	Encourage child to look for different toys placed around them and turn their head in different directions
WEIGHTBEARING THROUGH ARMS	Child places hands on floor and reaches for toys on floor	Hold child's favourite toy slightly above their head and encourage them to push up to look at toy	Place child's favourite toy on an elevated surface (e.g. small table, cushion) and encourage them to push up to see/ retrieve the toy
FINE & VISUAL MOTOR BUILDING BLOCKS	Build blocks up for your child and encourage them to knock them down	Encourage your child to play with the blocks themselves	Encourage your child to build a tower using the blocks
IPAD/TABLET	Watch a cartoon on Ipad/Tablet while tummy lying	Clap/Dance etc. along to song playing on Ipad/Tablet	Reach out to touch Ipad/Tablet screen
SORTING TOYS	Pick up toys from floor in front	Pick up toys and put into box in front	Pick up toy from box and place into another box

Tummy-lying is a difficult position by itself; focus on your child tolerating and enjoying this position. Keep activities simple as the position is quite difficult. See activity suggestions in the resource section to choose other ability and participation activities for your child.

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#### Communication

Tummy lying may make it more difficult for children to make sounds (vocalise), as their chest is compressed in this position. However, communication goals are a good way to provide the motivation they need to practice this important position.

Remember all activities incorporate communication and can be used to work on communication goals. Make sure that you are clear about what goal you are going to focus on to help your child develop their skills. Is it listening and attention? Understanding new words? Practising making and copying sounds (vocalising)? If your child attends Speech and Language Therapy, work with your Speech and Language therapist to help the development of your child's communication skills.

#### Sensory skills

When tummy lying, your child can gain a sense of security. This position helps to develop visual focusing and tracking, as well as a sense of body awareness (proprioception). If your child has reasonable head control, they will be able to play in this position for some time. This will continue to strengthen their muscles and enable them to explore their environment and look around.



If you have positioned Playpak to achieve different goals or to facilitate play/therapy in ways not mentioned above, we would love to hear from you. You can find our contact details in the 'Contact Us' section of this booklet.



## Side Lying

#### Why is side lying important?

Side lying is not, strictly speaking, a separate developmental stage of its own. In typical child development, children pass through side lying when moving from back lying to tummy lying and vice versa.

However, for some children with developmental delay, back lying or tummy lying present too many challenges. It can be difficult for children who have uneven muscle tone (one side of their body may be different to the other) or with strong reflexes, to use both sides of their body together and bring their hands together in the middle. Side lying can reduce strong extension and, with the help of gravity, can help a child to bring their arms together.

Similarly, children with hemiplegia (a condition where one side of the body is weaker than the other) have difficulty using their affected side when completing activities. Placing a child on their affected side can help to control unwanted arm movements as well as improving the use of the affected side.

Side lying frees children's hands and, as a result, can promote development of fine motor skills, coordination and grasp. It gives children a sense of body awareness and opportunities for sensory play.

It is important for children to switch the side they lie on in order to maintain symmetry. You can use side lying to work on your child's rolling abilities. Some children with developmental delay "log roll" – moving their whole body as one piece. The aim is to develop "segmental rolling" – where their head turns first, followed by the shoulders, then trunk, hips, legs and feet.



#### Setting up your Playpak for side lying

Side lying can be accommodated in many ways, including:

- · Positioning your child on their side in between the two rolls
- Using the rolls in a "chair shape", with the large roll behind their head and back, and the small roll supporting their bottom and keeping their legs bent
- As shown in the picture using the strap/belt and rolls. Extra rolls can also be useful in positioning your child in side lying

Remember to go at their pace and grade the activities for their ability (see p.12 for Grading). A list of activities can be found in the Resource section (p.60-67). From here, you can pick and choose activities that best suit your child and the developmental area you want to work on (e.g. gross motor skills, fine motor skills, bilateral coordination).

Because side lying is a challenging position, achieving this position is a skill in itself. As a result, the list of activities for side lying is small in comparison to other Playpak positions. On the next page there are some activities you can carry out with your child in the side lying position:







## **Side Lying Position**

SIDE LYI	NG POSI	ΓΙΟΝ
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ACTIVITY	EASY	MEDIUM	HARDER	
GROSS MOTOR	Roll or throw a small ball to	Roll or throw a small ball to	Roll or throw ball to either rolling on	
BALL PLAY	family member	family member	sides to do so	
FINE & VISUAL MOTOR	Hit drum, pot, etc. using hands to make	Hit drum, pot, etc. using items (e.g.	Play with an interactive	
MUSICAL TOYS	a noise	drumstick, spoon) to make a noise	sound toy	
	the label of the former with	Disco de la das terras	11	
REACH	Hold child's favourite toy in front of them and encourage them	Place child's toys slightly out of reach and encourage them	Use toys which mean the child will have to repeat reaching	
	to reach for it	to reach for different toys	movement e.g. sorting shape toys, music or sound toys	
POPPING BUBBLES	Blow large bubbles	Blow large bubbles	Blow smaller bubbles at a distance which	
	encourage them to reach out and pop	further away from child	they can reach with some stretching out	

Side lying is a difficult position by itself; focus on your child MAINTAINING and enjoying this position. Keep activities simple. See activity suggestions in the resource section to choose other ability and participation activities for your child.

#### Communication

Side lying may make it more difficult for your child to make sounds (vocalise), as their chest is compressed in this position. However, communication goals are a good way to provide the motivation they need to practice this important therapeutic position.

#### Sensory skills

Because asymmetrical muscle tone and/or reflexes can affect your child's symmetry, side lying reduces the effects of these, meaning that your child is able to experience more usual movement sensations. They can also use their eyes more efficiently to follow objects when their head position is more central in relation to the rest of their body.

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### **Floor Sitting**

Sitting is considered a vital part of the developmental sequence because of the other skills which are based upon its foundation. Sitting allows hands and arms to be free while the trunk and pelvis are stabilised. In turn, this allows handling of objects, exploration, increased learning opportunities and interaction with the environment.

### Configuring Playpak for floor sitting

The horseshoe supports included in Playpak can be configured to provide this stability. Rolls can be placed in between the child's legs to give a wider base of support and prevent scissoring (abduction). Likewise, a roll can be placed at the child's heels to provide resistance against sliding forwards.



For children with poor trunk control, you can re-position the horseshoe supports. A popular way to do this is by placing the small horseshoe support on top of the large horseshoe support in the opposite direction, as pictured on p.37. You can then place the short roll at their back or wedge the headrest/tummy rest in between the child's back and the red horseshoe so the child still receives some support at the back.

Alternatively, some families use tables or trays to provide anterior support. The little girl pictured on the right is using the strap/belt, with the long roll placed between her and the table. This provides extra postural support as well as encouraging her to reach to the table.

### Activities in floor sitting position

Remember to go at your child's pace and grade the activities to suit their ability. See page 12 for information on how to grade. In addition to the activities below, a list of activities can be found in the Resource section (p.60-67). From here, you can choose activities that best suit your child and the developmental area you want to work on (e.g. gross motor skills, fine motor skills, and bilateral coordination). Below are some activities you can carry out with your child in the floor sitting position.



## **Sitting Position**

SITTING POSITION				
ACTIVITY	EASY	MEDIUM	HARDER	
GROSS MOTOR POPPING BUBBLES	Blow large bubbles close to child and encourage them to reach out and pop	Blow large bubbles further away from child. Encourage popping with two hands together	Blow smaller bubbles at a distance which they can reach with some stretching out	
BALL PLAY	Short distance throwing and catching with a large inflatable beach ball or balloon	Longer distance throwing and catch- ing with a slightly smaller or heavier ball	Try more complex games with a smaller or heavier ball such as saying the alphabet while throwing and catching	
SAND PLAY	Find objects buried in sand	Fill buckets and pour sand	Build sand castles and encourage digging in sand	
SINCE FINE MOTOR AND VISUAL MOTOR SKILLS ARE SO CLOSELY RELATED, MANY ACTIVITIES WORK ON BOTH THESE AREAS.				

FINE & VISUAL MOTOR	Place large-medium sized pieces of Lego or Duplo on table top and encourage child to pick them up	Pick up Lego and attach together	Build shapes and patterns with
BUILDING BLOCKS	Build a tower with two 2" building blocks	Aim to make a higher tower with smaller blocks	Copy a pattern of building blocks

# **Sitting Position**

SITTING POSITION				
ACTIVITY	EASY	MEDIUM	HARDER	
TEARING & STICKING	Tear some tinfoil, tissue paper or newspaper	Tear paper and roll into small balls to fill shapes	Tear around shapes (circle, square, triangle)	
THREADING ACTIVITIES	Place straws upright in play-doh and thread through large bead holes or rigatoni pasta	Thread beads of different shapes and colours through a thinner piece of lace/string/thread/ ribbon	Copy patterns whilst threading	
JIGSAW	Primary colours 4-6 pieces Large pieces	Introduce more colours 6-8 pieces Smaller pieces	Patterned pictures 8-12 pieces Smaller pieces again	
SORTING SHAPES	Sort simple shapes with primary colours	Introduce more complex shapes and colours	Try sorting smaller shapes (e.g. coins into a money box)	
Introduce lots of different colours and textures to stimulate the senses!				

### Communication

The social posture of sitting is an excellent position for focusing on introducing new words and phrases, especially describing words and action words. If your child's floor sitting skills are still developing, remember that you may have to provide more support if the goal is learning new words.

Remember all activities incorporate communication. Make sure that you are clear about what goal you are going to focus on to help your child develop his skills. Is it listening and attention? Or understanding new words?

### Sensory skills

With head control developing well and when securely supported in a sitting posture, your child's hands are free to explore a much greater range of textures, shapes, and sizes. Use a variety of these (always with supervision) to give your child a range of sensory experiences. Your child will learn about rough and smooth, light and heavy, big and small, up and down.

> If you have positioned Playpak to achieve different goals or to facilitate play/therapy in ways not mentioned above, we would love to hear from you. You can find our contact details in the 'Contact Us' section of this booklet.

Use rattles. Squeaky toys, brightly coloured balls, crackly paper etc. To encourage your child's vision, hearing and sensation. Four-point kneeling enables children to move into and out of other positions: they can begin to move onto hands and knees from tummylying, and then into a sitting position. Depending on each child's capabilities, some will learn to use hands and knees as a building block for movement – they may go on to be able to tall kneel (hands off the floor), or even begin to crawl.

### Configuring Playpak for four-point kneeling

From a tummy lying (prone) position, help your child to bend their hips and knees until their legs are tucked underneath them. Depending on your child's level of ability, you may need to place the head/tummy support or a roll under their tummy, and help them push up on their arms into a kneeling position. Your child's level of ability in four-point kneeling will determine the type of activity they will be able to manage.



### Activities for four-point kneeling

The position that you place your child in and the activity that you choose for your child in that position are equally important. A four-point kneeling position will be challenging for your child and this may be enough to work on initially.



Remember to go at your child's pace and grade the activities to suit their ability. See page 12 for information on how to grade. In addition to the activities below, a list of activities can be found in the Resource section (p.60-67). From here, you can choose activities that best suit your child and the developmental area you want to work on (e.g. gross motor skills, fine motor skills, and bilateral coordination). Below are some activities you can carry out with your child in the four-point kneeling position.



### **Four-Point Kneeling Position**

#### FOUR-POINT KNEELING POSITION

SKILL AREA	EASY	MEDIUM	HARDER
GROSS MOTOR FOCUS ON HOLDING POSITION	Encourage your child to sit in a "bunny" position	Up on all fours and hold head up for a short period of time	Up on all fours and hold head up for a longer period of time
FINE & VISUAL MOTOR TRACKING OBJECTS	Sort simple shapes with primary colours using left or right arm	Introduce more complex shapes and colours. Start on the same side and cross midline to set shape down	Try sorting smaller shapes (e.g. coins into a money box). Start on opposite side and cross midline

Remember to add sensory components by introducing various textures, noises and surfaces.



See activity suggestions in the resource section to choose other ability and participation activities for your child.

### Communication

Hands and knees may be a difficult new position for your child, but communication goals are a good way to provide the motivation your child needs to practice this important developmental position.

## Sensory skills

The palms of the hands are naturally sensitive, but some children can be very sensitive and don't like to touch things. While it is normal to avoid touching things that don't feel nice to us, children who are very sensitive to touch limit their opportunities for exploring and learning. Weight bearing through extended arms and open palms exposes your child to numerous sensations and can help to improve tolerance for touch. Therapists call this "sensory integration" – speak to your occupational therapist for further advice if you have queries or concerns about your child's sensory tolerance.



You can use the horseshoe supports and rolls to gradually build up your child's tolerance to the four-point kneeling position.



# How to review your progress

It's useful to try to review your child's progress because it:

- Helps you to understand any effects that Playpak may have on your child's development;
- Keeps you focused on encouraging your child to achieve the next stage;
- Helps you look back and remember how far your child has come, especially if you take photographs and/or videos as you go along.



### How to review your progress using the MAP Mobility Assessment

As Playpak concentrates primarily on your child's ability, you can use the MAP Ability Assessment (p. 66) to review your child's progress. After about a month of Playpak use, check the MAP Ability Assessment and see how your child is doing within each category. Simply choose whether you feel your child's skills in the six ability areas (hand function, floor play, communication, attention, exploration and fun) are (a) worse than before you started using Playpak; (b) the same as before; or (c) better than before. Make a note of any specific changes you have noticed and try to describe what is different. If you feel your child hasn't made any progress, don't worry, just keep going and review again in another month or whenever you feel your child has made progress.

We'd love to hear how you and your child are getting on with your Playpak Therapy Programme, especially if you've set Playpak up differently than mentioned in this programme, are using it for different positions than mentioned, or have completed one or two reviews. Going by the stories we have heard from families through Facebook and Twitter, we believe that Playpak can benefit children in a number of ways. It can be difficult to show this because families share their stories in so many different ways.

The Playpak Therapy Programme provides families, not only with a therapy tool, but a system for recording progress, which means we can compare stories. And if we can show patterns, we can demonstrate more reliably the benefits of Playpak to families and their therapists.

So, if you'd like to be part of this bigger picture, please email your reviews to playpak.programme@fireflyfriends.com

# Top Tips

- Choose a time when your child is well rested and ready for play for your Playpak session. Try to wait at least 30 minutes after eating before using Playpak and avoid using it before bed.
- When trying new positions, use Playpak for a short period of time initially, (around 5 minutes). Once your child becomes comfortable with the position you are using, increase their time in Playpak, going at their pace. You can then try another position.
- You may need to adapt components to find the best arrangement for your child while they're in Playpak.
  Have a second person with you when using Playpak at the beginning until you are confident in how to set it up to give your child the level of support they need.
- Try to make the experience fun for everyone involved – include brothers, sisters, friends and use toys, music or everyday tasks (e.g. eating a snack).

- Keep an eye on your child's confidence before and after using Playpak and note how much your child is enjoying the Playpak session.
- Note how much your child is motivated to use Playpak before using it.
- Take photographs and videos as you go along, remembering to note the date – they form a really helpful part of your review.



### Contact

If you have any questions or would like to provide feedback, you can contact us at:

Phone: +44 (0) 28 9267 8879

**Email:** hello@fireflyfriends.com

Address: Firefly by Leckey, 19C Ballinderry Road, Lisburn, Northern Ireland, BT28 2SA



# **SECTION 3** RESOURCES



## ICF-CY and Map explained

The International Classification of Functioning, Disability and Health for Children and Youth (ICF-CY) is an internationally recognised framework which is designed "to record the characteristics of the developing child and the influence of its surrounding environment." (World Health Organisation, 2007). This means that health and functioning are emphasised, and disability or difficulties with function are viewed simply as part of the overall health spectrum. The focus is balanced between what children and young people are able to do, as well what they have difficulty with. The overall model is below:



International Classification of Functioning, Disability and Health Framework for Children and Youth (WHO, 2007).

### ICF-CY and Map explained

The **health condition** is generally considered the child's diagnosis – this could equally be 'asthma' or 'cerebral palsy'. **Body structures and functions** relate to the health condition and describe what is wrong with the body. This may be wheezing (for asthma), or high muscle tone (for cerebral palsy).

The body functions and structures affect the child's **activity**. Does the child become short of breath? Can the child rise to stand and walk? What is the child capable of doing?

Activity impacts on the child's level of **participation** in everyday activities such as playing, eating, dressing, cycling, going to the shops, involvement in sports etc.

Ability Bo Child Mile Bo Gijity Participo Participo Alongside these factors is the acknowledgement that the child's **environment** and individual **personal factors** influence their development. Parents, siblings, motivation, cognitive ability, housing, infrastructure of local health and education services, and access to sports and leisure facilities are a few of the environmental and personal factors that may impact on a child's development in each area.

Research suggests that therapy which looks at multiple areas appears to be more beneficial than a single treatment approach. Therefore, interventions should target body functions and structures, activities and participation, as well as environmental and personal factors (Chiarello & Kolobe, 2006).

Map Model (©Leckey 2015)

#### Firefly

At Firefly by Leckey, our vision is to create a world where every child with special needs can enjoy a childhood filled with play, participation and possibilities.

Working with the community of parents and therapists we will campaign for change and co-create unique, innovative, life changing products.

We recognise that we are not able to change a child's health condition or environment, but by using Firefly products, we believe we can have an influence on their body structures, activities and participation. So, we have developed our own MAP framework to reflect where we can help.



#### The MAP

The MAP is Firefly and Leckey's own framework for understanding how products can help children with disabilities. With the child, their family and the products at the centre of the model, their developmental progress is influenced by mobility, ability and participation.

For example, by using a product to stretch muscles (body functions and structures in the ICF-CY), we may actually improve **mobility** which we define as a child being able to access their world and gain as much independence as possible. And of course, products which move will encourage mobility too!

A product might encourage a child to develop hand function, concentration or communication (activities in the ICF-CY). We have termed this **ability**, which we define as improving physical, cognitive and social development.

Similarly to the ICF-CY, we have defined **participation** as being able to experience as many activities as possible.

# Therapy terms explained

#### **Gross motor skills**

Large movements usually related to developmental milestones e.g. rolling, sitting, crawling, cruising and walking.

#### Reach

Part of gross motor skills, stretching arms to reach across the body, upwards or downwards.

#### Fine motor skills

Small movements usually related to hand function e.g. pincer grasp, ability to hold a crayon, manage cutlery, or buttons etc.

#### **Bilateral hand function**

Part of fine motor skills using both hands together to hold, throw, catch, build, open etc.

#### Visual-motor skills

The ability to co-ordinate eyes and movements. Visual-motor skills affect the ability to kick a ball (eye-foot co-ordination), pick up a block (eye-hand co-ordination), or drink from a cup (hand-mouth co-ordination).

#### **Body awareness**

The ability to recognise body parts and know where they are in relation to other body parts or surroundings without having to look.

#### Confidence

Self-assured and willing to try new things.

#### Initiation

The ability to start a movement and/or the direction of movement.

#### Engagement

Obvious enjoyment from taking part in an activity.

#### Motivation

Eagerness to take part in an activity and responds positively. May become upset when it's time to finish.

#### Communication

The ability to listen and respond through facial expressions, gestures, sounds or words.



# **Ability Activity Suggestions**

ACTIVITY SUGGESTIONS	GROSS MOTOR SKILLS	FINE MOTOR SKILLS
BALL PLAY		
BUILD BLOCKS		
CLAPPING HANDS TO SONG/CLAPPING GAME		
CIRCLE TIME		
CUTTING AND STICKING (ASSIST WHEN REQUIRED)		•
DRAW AT FLOOR LEVEL		
DRESSING- ZIPS AND BUTTONS		
FOLLOW TOYS WITH EYES		
FOLLOW TOYS WITH HEAD		
JIGSAWS		
MATCHING OR STRATEGY GAMES E.G. CONNECT 4 AND SNAP		•
PAINT WITH Q TIPS, SPONGES, FINGERS OR POMPOMS		
PASS OBJECT FROM ONE HAND TO ANOTHER		
PEEL SOME FRUIT		
PICKING UP SMALL OBJECTS FROM THE TABLE E.G. LEGO PIECES, BEADS, COINS ETC.		•
PLAY GAMES WITH FINE MOTOR SKILLS E.G. BATTLESHIPS OR OPERATION		
PLAY-DOH (PLAY WITH IT, ROLL IT OUT, PUSH SMALL OB- JECTS INTO IT OR CUT)		•
POINT AND NAME OBJECTS		•

NOTE: MANY ACTIVITIES CAN ADDRESS ALMOST ALL THE ABILITY AREAS WITH SOME THOUGHT. THE DOTS ( ) LISTED CAPTURE THE MAIN BENEFITS OF EACH ACTIVITY, BUT THERE ARE MANY OVERLAPS. FOR EXAMPLE, TALKING YOUR CHILD THROUGH YOUR CHOSEN ACTIVITY INCLUDES COMMUNICATION IN EVERY CASE.



## Ability Activity Suggestions continued

ACTIVITY SUGGESTIONS	GROSS MOTOR SKILLS	FINE MOTOR SKILLS
POPPING BUBBLES		
POPPING BUBBLE WRAP		
POSTING MONEY IN MONEY BOX/POSTING SHAPE GAMES		
SAND PLAY		
SKITTLES/BOWLING		
SORTING TOYS BY COLOUR		
SORTING TOYS BY SIZE		
SQUEEZING BOTTLES		
TEARING PAPER (GRADE THE LEVEL OF DIFFICULTY BY CHANGING TEXTURE OF MATERIAL, E.G. CARDBOARD)		
THREADING ACTIVITIES		
TOUCHING OBJECTS OF DIFFERENT TEXTURES		
TRANSFER MARBLES OR WATER BEADS BETWEEN BOWLS		

NOTE: MANY ACTIVITIES CAN ADDRESS ALMOST ALL THE ABILITY AREAS WITH SOME THOUGHT. THE DOTS ( ) LISTED CAPTURE THE MAIN BENEFITS OF EACH ACTIVITY, BUT THERE ARE MANY OVERLAPS. FOR EXAMPLE, TALKING YOUR CHILD THROUGH YOUR CHOSEN ACTIVITY INCLUDES COMMUNICATION IN EVERY CASE.



# **Ability Activity Suggestions - Positions**

ACTIVITY SUGGESTIONS	TUMMY LYING	BACK LYING	
BALL PLAY		•	
BUILD BLOCKS			
CIRCLE TIME			
CLAPPING HANDS TO SONG/CLAPPING GAME			
CUTTING AND STICKING (ASSIST WHEN REQUIRED)	•		
DRAW AT FLOOR LEVEL			
DRESSING-ZIPS AND BUTTONS			
FOLLOW TOYS WITH EYES			
FOLLOW TOYS WITH HEAD			
JIGSAWS		•	
MATCHING OR STRATEGY GAMES E.G. CONNECT 4 AND SNAP	•		
PAINT WITH Q TIPS, SPONGES, FINGERS OR POMPOMS	•	•	
PASS OBJECT FROM ONE HAND TO ANOTHER			
PEEL SOME FRUIT			
PICKING UP SMALL OBJECTS FROM THE TABLE E.G. LEGO PIECES, BEADS, COINS ETC.			
PLAY-DOH (PLAY WITH IT, ROLL IT OUT, PUSH SMALL OB- JECTS INTO IT OR CUT IT)			
PLAY GAMES WITH FINE MOTOR SKILLS E.G. BATTLESHIPS OR OPERATION		•	
POINT AND NAME OBJECTS			

NOTE: MANY ACTIVITIES CAN ADDRESS ALMOST ALL THE ABILITY AREAS WITH SOME THOUGHT. THE DOTS ( ) LISTED CAPTURE THE MAIN BENEFITS OF EACH ACTIVITY, BUT THERE ARE MANY OVERLAPS. FOR EXAMPLE, TALKING YOUR CHILD THROUGH YOUR CHOSEN ACTIVITY INCLUDES COMMUNICATION IN EVERY CASE.



# **Ability Suggestions - Positions**

ACTIVITY SUGGESTIONS	TUMMY LYING	BACK LYING	
POPPING BUBBLES			
POPPING BUBBLE WRAP		•	
POSTING MONEY IN MONEY BOX/POSTING SHAPE GAMES		•	
SAND PLAY			
SKITTLES/BOWLING	•	•	
SORTING TOYS BY COLOUR		•	
SORTING TOYS BY SIZE	•	•	
SQUEEZING BOTTLES		•	
TEARING PAPER (GRADE THE LEVEL OF DIFFICULTY BY CHANGING TEXTURE OF MATERIAL, E.G. CARDBOARD)			
THREADING ACTIVITIES		•	
TOUCHING OBJECTS OF DIFFERENT TEXTURES		•	
TRANSFER MARBLES OR WATER BEADS BETWEEN BOWLS		•	

NOTE: MANY ACTIVITIES CAN ADDRESS ALMOST ALL THE ABILITY AREAS WITH SOME THOUGHT. THE DOTS ( ) LISTED CAPTURE THE MAIN BENEFITS OF EACH ACTIVITY, BUT THERE ARE MANY OVERLAPS. FOR EXAMPLE, TALKING YOUR CHILD THROUGH YOUR CHOSEN ACTIVITY INCLUDES COMMUNICATION IN EVERY CASE.



### MAP Ability Assessment

We would love to hear about your progress send your reviews, photos and videos to:

> upsee.programme @fireflyfriends.com

\*see p50 for specific guidance

Your child's name:

#### Date of birth:

#### **Diagnosis:**

Date of assessment/review:

Ability Area	Worse than before	Same as before	Better than before	<b>Your comments</b> (describe any differences you have noticed)
	$\sim$	<b>—</b>		you have noticed,
Gross motor skills				
Brings two hands together to the middle of the body, lifts arms above head, reaches, throws, catches or claps.				
Fine motor skills				
Uses both hands together, uses different grasps (whole hand, index finger and thumb, index middle finger and thumb). Holds small objects in hands, or passes objects from one hand to another.				
Visual motor skills				
Picks up objects and manipulates them with increasing accuracy (jigsaws, shape sorters etc.). Brings spoon or cup to mouth.				
Sensory skills				
Level of interest in people, surroundings, messy play or activities with light, sound or touch.				
Social/communication skills				
Recognising or interacting with familiar people. Can make preferences known. Level of enjoyment of others' company, engagement in activities, smiling.				

# Please share your progress

We love seeing and hearing about your progress using Playpak. It really helps us advise and guide other parents and therapists within the community and helps them decide if Playpak is suitable for them and their child or client.

It would be great if you could send:

Photos of three successive reviews using the Ability Assessments Sheets (covering a minimum period of 2 months)

- Photos or videos demonstrating the progress achieved at each review
- A photo or scan of one completed Ability Assessment
- Photos and videos demonstrating each exercise you worked on

#### You can send these to playpak.programme@fireflyfriends.com

\*We love reviewing your photos and video footage. If possible, please send the highest resolution photos and videos you can. This really helps everyone. Thanks!

### References

- 1. Majnemer A, Barr R,G (2005) Influence of supine sleep positioning on early motor milestone acquisition, Developmental Medicine and Child Neurology, 47, 370-76.
- 2. Sieglinde M (2006) Teaching Motor Skills for Children with Cerebral Palsy and Similar Movement Disorders, Woodbine House Inc, United States of America.





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