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Safety of toys ~~—~~ ==

Part 8:

Age determination: first age grade for the appropriate play of toys

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 181, *Safety of toys*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 52, *Safety of Toys*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO/TR 8124-8:2016), which has been technically revised.

The main changes ~~compared to the previous edition~~ are as follows:

- ~~Revision of~~ the title of the document has been revised to better align with the scope and intent of the contents therein;
- ~~Clarification~~ clarification has been added that this document only provides information for use in the determination of the lowest age at which children start playing with toys in specific toy sub-categories. ~~This means that toys of the same sub-categories suitable for older children due to additional skills or complexity are not listed. Due to the number of pieces, dimensions, weight, level of detail and realism, brand/license and special functions, the actual appropriate age grade for a specific toy can and will change/increase the intended age.~~
- ~~Inclusion of~~ "projectile toys" has been included as a sub-category;
- ~~Addition of an annex~~ Annex C has been added to provide visual examples of the differing levels of complexity or play pattern of product categories from the simplest operation (starting age grade) to higher

appropriate

age

grades.

A list of all parts in the ISO 8124 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

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## Introduction

~~This document provides information for use in the determination of the lowest age at which children start playing with toys in specific sub-categories. Toys of the same sub-categories suitable for older children due to additional skills or complexity are not listed. Due to a number of factors, including size, complexity or other considerations (e.g. the number of pieces, dimensions, weight, level of detail and realism, brand or licence and special functions), the actual appropriate age grade for a specific toy can change or increase the intended age. Specific products can therefore carry an age grade which is appropriate for a child that is older than the starting age grade listed in this document.~~

This document is based on the advice of experts and on the traditional play patterns of children; ~~they might differ from.~~

NOTE It is possible that national or regional regulations or directives ~~that will~~ classify a toy, or category of toy, as being intended for a different age.

~~Annex B~~ Annex B gives details on how information on electronic toys and electronics in toys was considered in the development of this document.

~~As stated above, it is important to be aware that due to a number of factors including size, complexity or other considerations, specific products can and will carry an age grade which is appropriate for a child that is older than the starting age grade listed in this document.~~

~~Annex C~~ Annex C gives details on how differences in complexity or play pattern will affect the appropriate age grade beyond the starting age grade.

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# Safety of toys

## Part 8: Age determination: first age grade for the appropriate play of toys

### 1 Scope

This document provides an indication of the lowest age at which children start playing with toys in specific toy sub-categories and. It is primarily directed to manufacturers and agencies that evaluate the compliance of toys with safety standards.

This document can also be used as a reference to determine the appropriateness of toys by earliest age, for use by distributors, institutions, and organizations involved with child play, as well as by paediatric institutions, teachers, other professionals that use toys in their routine activities, and consumers.

The age at which children develop different abilities is unique for each individual child. This document illustrates the age ranges during which a typical child has developed certain abilities.

Although age grading has safety implications, this document is not intended to address specific safety requirements. Specific safety requirements for toys can be found in the ISO 8124 series of toy safety standards (and in other regional toy safety standards and regulations). As an example, such standards will restrict (e.g. restriction of the presence of small parts and small balls in toys intended for certain age groups, due to the choking hazard.) can be found in the ISO 8124 series and in other regional toy safety standards and regulations.

(<https://standards.iteh.ai>)

### 2 Normative references

There are no normative references in this document.

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

#### 3.1

##### age group

children that are all within a specified age range which is generally associated with certain developmental milestones and/or certain behaviours, or both

Note 1 to entry: Extracted Adapted from Reference [5]. [5].

#### 3.2

##### toy category

classification of the toy according to its specific purpose and function

Note 1 to entry: This document implements the following seven toy categories (see Annex A):

— sensorimotor activities - first age;

    — toys for physical activities;

    — toys for intellectual activities;

    — toys that reproduce the technical world;

    — toys for the development of feelings and empathy;

    — toys for creative activities;

    — toys for social relationships.

Note-2-to entry:- See References ~~[2]~~ [2] and ~~[3]~~ [3].

### **3.3**

#### **3**

##### **toy sub-category**

type or group of toys with similar play features within a toy category

### **3.4**

##### **gross motor skills**

activities of the large muscles of the body, related to functions of sustaining head positions, sitting, walking and running

### **3.5**

##### **fine motor skills**

clenching motion activities of the hands, such as gripping, clasping and pincer movements as well as fine movements used for drawing and writing

### **3.6**

##### **starting age**

first age at which it is appropriate for a child to play with a specific type of toy

Note-1-to entry:- At very young ages, “play” can be considered as the interaction between a caregiver and a child, where the caregiver is using the toy to entertain or ~~get~~ attract the attention of the child such as with a rattle. It is only after further development that the child can actually play with the toy.

Note-2-to entry:- For the purposes of this document, a range of starting ages is presented for various toy sub-categories. The age range covers the first day of the lowest age to the day prior to the highest age in the range. For example, a starting age range of 4- months to under 8- months would be from the day that the child becomes 4- months old until the end of the day prior to the child becoming 8- months old.

Note-3-to entry:- When a starting age is mentioned for specific categories of toys, it does not mean that all the toys belonging to that category are to be classified as suitable for that age. The number of pieces, dimensions, weight, level of detail and realism, brand/~~license or licence~~ and special functions of the specific toy can change ~~or~~ increase the intended age (see ~~also~~ the examples provided for reference in ~~Annex C~~ Annex C).

## 4 Starting ages

### 4.1 Children with starting ages birth to under 4 months

#### 4.1.1 Aspects related to ~~the~~ motor and cognitive development, and behaviour of children with starting ages birth to under 4 months

Usually, the following development and behaviour can be observed in children with starting ages birth to under 4 months.

- ~~Do~~They do not yet have the motor abilities required to play with toys; ~~they~~toys are only used as objects for exploration and entertainment rather than for play.
- ~~Do~~They do not yet have the ability to interact with books due to the lack of physical, cognitive and visual abilities required for this activity.
- ~~Are~~They are attracted by multi-sensory elements and are able to recognize their parents; have sucking and breastfeeding reflex, but are unable to sit up by themselves; have abrupt, uncontrolled and limited motions. They touch, grab, hold, press and shake anything in their hands unaware of the strength in their arms.
- Around 3 months, they are capable of grabbing (reflex grasp) and holding objects (whether suspended or not). They detect, explore and feel objects with their hands and mouth.
- The learning process occurs through the senses and reflexes by assimilating reactions to stimuli and repetitive motions.
- The auditory system is ~~functioning~~functional at the time of birth, but it needs neurological maturation and sensory experiences for the hearing functions to develop fully. Children demonstrate a lot of sensitivity to ambient sounds due to their immaturity and lack of experience. From birth, children begin to react to sounds and human speech. By around 2 months, most babies ~~get~~become quiet when they hear familiar voices. By 3 months, they locate and respond to sounds and make vocalizations that could be related to sensations associated with bathing and eating.
- ~~They~~ turn the head towards a sound and are attracted by objects that emit sounds that are known to them as being a part of their routine.
- Vision development is progressive. At birth, the eye focus of the child is best at about 20 cm. After 1 month, children are able to focus on objects up to 30 cm away, and by 3 months they can see some meters ahead. Visual acuity upon birth is from 2,5% to 5%, and improves to near 20% up to the third month.
- ~~Are~~They are attracted by bright colours such as yellow and red although they cannot clearly distinguish between them. At the age of 2 months, the primary colour receptors are developed and they can distinguish between contrasts and the primary colours blue, red, and yellow.

#### 4.1.2 Recommended toy sub-categories

The toy sub-categories in ~~Table 1~~Table 1 are recommended for this age group.

**Table 1 — Toy sub-categories for children from birth to under 4 months of age**

Sub-category	Starting age	Description and examples of appropriate toys
1.01	0 months +	Rattles and rings

Sub-category	Starting age	Description and examples of appropriate toys
1.03	0-months +	<b>Mobiles, with or without sound</b> – toys with miscellaneous figures and shapes to be mounted above the crib and intended to be out of the reach of the child.
1.47	0-months +	<b>Musical boxes</b> – toys to be mounted on or near a crib with handle or button for adult activation.
1.04	2-months +	<b>Crib gyms and playmats</b> – mats with simple play features or activities; <del>might</del> can include overhead structures that <del>might</del> can have dangling objects intended for the child to reach, grasp, or hit.
1.13	2-months +	<b>Simple dolls and animals</b> – soft-stuffed dolls and animals made of fabric or plush with or without clothes and fixed details which cannot be removed.
1.05	3-months +	<b>Cradle and playpen toys</b> – balls, characters attached to cribs, strollers, or enclosures.
1.09	3-months +	<b>Squeeze toys</b> – constructed of soft material, with or without internal rattle or noise feature.
1.25	3-months +	<b>Cloth and similar soft material balls and geometric forms.</b>

## 4.2 Children with starting ages 4-months to under 8-months

### 4.2.1 Aspects related to ~~the~~ motor and cognitive development, and behaviour of children with starting ages 4-months to under 8-months

Usually, the following development and behaviour can be observed in children with starting ages 4-months to under 8-months.

- ~~Are~~They are attracted by multi-sensory elements and have increasing interest in the environment surrounding them. ~~Are~~They are in the oral phase and teeth begin to appear. ~~Have~~They have natural involuntary motions. The learning process still occurs through the senses, especially the mouth, and reflexes, by assimilating reactions to stimuli and repetitive motions.
- ~~Continue with~~Their hearing development ~~continues~~ and ~~they~~ already use their visual and motor abilities to play with other people. ~~Are~~They are capable of interacting with toys and objects. ~~Begin~~They are beginning to be aware of the existence and permanence of objects (objects continue to exist even when out of sight). ~~Imitate~~They imitate simple motions and gestures.
- ~~Are~~They are perfectly capable of locating sounds. ~~Engage~~They engage in vocal games that emphasize repetition of a same syllable like “mamama”, “papapa”, from 4-months on. ~~Start~~They start interacting with ~~the adult~~adults to develop language games ~~with the child~~ in which words are spoken in a repetitive way. ~~Enjoy~~They enjoy songs and sounds. From 4 to 6-months, they are more sensitive to sounds, and ~~they~~ react to changes in voice tones and sounds.
- ~~Use the~~They use their limbs to move, ~~for example,~~ rolling onto their sides, ~~or~~ launching themselves forwards and backwards. ~~Have~~They have greater ability to position themselves on the floor to play. ~~They~~ start sitting by themselves, and ~~start~~ crawling between 5 and 6-months.
- ~~Have~~They have low gross and fine motor coordination, as well as involuntary motions of the limbs. The fine motor coordination of hands is still developing. ~~Grab~~They grab objects with the palm of hands (primitive grasping). ~~Grab~~They grab strongly, extend the palm of their hand to reach objects, and are capable of transferring objects from one hand to another.